DOCUMENT RESUME

ED 438 381 UD 033 351

AUTHOR	Kaufman, Philip; Kwon, Jin Y.; Klein, Steve
TITLE	Dropout Rates in the United States, 1998. Statistical Analysis Report.
INSTITUTION	MPR Associates, Berkeley, CA.
SPONS AGENCY	National Center for Education Statistics (ED), Washington, DC.
REPORT NO	NCES-2000-022
PUB DATE	2000-02-00
NOTE	99p.; For the 1997 report, see ED 431 051. Project officer was Christopher D. Chapman.
AVAILABLE FROM	ED Pubs, P.O. Box 1398. Jessup, MD 20794-1398. (One free copy while available.) Tel: 877-433-7827 (Toll Free). For full text: http://www.nces.ed.gov/pubsearch/pubsinfo.asap?pubid=200002. For bulk orders: Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954 (GPO number: 065-000-01274-0, $9). Tel: 202-512-1800.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	Black Students; Census Figures; Comparative Analysis; *Dropout Rate; *High School Graduates; High School Students; High Schools; Hispanic Americans; *Low Income Groups; National Surveys; *Racial Differences; School Holding Power; Socioeconomic Status; Tables (Data); Urban Youth; White Students

ABSTRACT

This report, 11th in a series, reports on high school dropout and completion rates. It presents data on rates in 1998 and includes time series data on high school dropout and completion rates for the period 1972 through 1998. The report also examines the characteristics of high school dropouts and high school completers in 1998. About 5 of every 100 young adults enrolled in high school in 1997 left school before October 1998 without successfully completing a high school program. Hispanic students were more likely than white and black students to leave school before completing a high school program. In 1998, young adults living in families with incomes in the lowest 20% of all family incomes were four times as likely to drop out of high school as their peers from families in the top 20% of the income distribution. Status dropout rates represent the proportion of young adults aged 16 through 24 who are out of school and who have not earned a high school diploma. Status dropouts accounted for 11.8% of the young adults aged 16 through 24 in the United States in 1998. Hispanic young adults continue to have higher status dropout rates than do their white or black counterparts. High school completion rates have increased for white and black young adults since the early 1970s, but this has not been true for Hispanic young adults. The percentage of young adults with an alternative high school credential has increased from 4.9% in 1990 to 10.1% in 1998. Three appendixes contain standard error and time series tables, supplemental tables, and technical notes. (Contains 36 tables and 5 figures.) (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 438 381

NATIONAL CENTER FOR EDUCATION STATISTICS

Dropout Rates in the United States 1998

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

UD033351

U.S. Department of Education
Office of Educational Research and Improvement NCES 2000-022

BEST COPY AVAILABLE

Customer Survey of OERI Publication Users

To help us improve future editions of this publication and give you better customer service, we would appreciate your comments on this survey form. Please check the appropriate box(es) below for each question. Responses will be kept completely confidential. You may return the survey by mail or FAX. It can be folded and taped closed to allow mailing to the address listed on the reverse side of this form, or it can be returned by FAX to 202–219–1321. **Many thanks for your customer feedback—it is very important to us!**

1a. Name of publication

1b. Publication number

1c. Author name

2. How did you receive a copy of this publication?

- ❑ Bought it
- ❑ Borrowed it
- ❑ Mailing list membership
- ❑ Telephone request
- ❑ Internet request
- ❑ Other (please describe)

3. Was this publication easy to get?

❑ Very ❑ Somewhat ❑ Not at all

4. How did you find out about this and other OERI publications? (Check all that apply.)

- ❑ Conferences
- ❑ Journal articles
- ❑ Teacher/educator
- ❑ Professional associations
- ❑ Internet (WWW)
- ❑ Publication announcement
- ❑ Received in mail
- ❑ OERI staff contact

5. For what purposes did you use this OERI publication? (Check all that apply.)

- ❑ Planning
- ❑ Policy or legislation
- ❑ Administrative decisions
- ❑ Teaching, class material
- ❑ Research/analysis
- ❑ General information
- ❑ Writing news articles, TV or radio material
- ❑ Marketing, sales, or promotion
- ❑ Other (please describe)

6. Did the publication help you accomplish whatever you needed it for?

❑ Yes ❑ No ❑ Partially

7. What is your occupation?

❑ Parent ❑ Teacher ❑ Administrator
❑ Librarian ❑ Researcher ❑ Statistician
❑ Journalist/writer ❑ Policy Analyst ❑ Student
❑ Program Planner
❑ Other (please specify)

8. How could this OERI publication (or other OERI publications) better meet your needs? (Check all that apply.)

- ❑ More important topics in education
- ❑ More timely release of data
- ❑ More text introductions to each section
- ❑ More research statistics
- ❑ Shorter reports (less than 10 pages)
- ❑ Other (please describe)

9. Overall, how satisfied are you with this product?	**Very Satisfied** ❑	**Satisfied** ❑	**Dissatisfied** ❑
a. Comprehensiveness of information	❑	❑	❑
b. Clarity of writing (readability, interpretability)	❑	❑	❑
c. Clarity of presentation (e.g., tables, charts)	❑	❑	❑
d. Timeliness of information	❑	❑	❑
e. Accuracy of information	❑	❑	❑
f. Clarity of technical notes	❑	❑	❑
g. Usefulness of resources and bibliography	❑	❑	❑
h. Organization	❑	❑	❑
i. Length	❑	❑	❑
j. Format	❑	❑	❑

PAPERWORK BURDEN STATEMENT
Office of Educational Research and Improvement (OERI)
Publication Customer Survey

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1880–0529. The time required to complete this information collection is estimated to average 10 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s), suggestions for improving this form, or concerns regarding the status of your individual submission of this form, write directly to: **P. Quinn, Room 204, Media and Information Services, OERI, U.S. Department of Education, 555 New Jersey Avenue NW, Washington, DC 20208–5570.**

BEST COPY AVAILABLE

OERI Publication Customer Survey

Media and Information Services
555 New Jersey Avenue NW—Rm. 202
Washington DC 20208–5570

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL PERMIT NO. 012935 WASHINGTON DC

POSTAGE WILL BE PAID BY US DEPARTMENT OF EDUCATION

V. Allen
Room 200
Media and Information Services
Office of Educational Research and Improvement
US Department of Education
555 New Jersey Avenue NW
Washington DC 20208–5570

*Fold on line—**TAPE CLOSED—DO NOT STAPLE***

10. Do you have any suggestions regarding the content or format of future editions of this publication or other comments?

MIS 1999-6532

NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report February 2000

Dropout Rates in the United States 1998

Phillip Kaufman
Jin Y. Kwon
Steve Klein
MPR Associates, Inc.

Christopher D. Chapman
National Center for Education Statistics

U.S. Department of Education
Office of Educational Research and Improvement NCES 2000-022

U.S. Department of Education
Richard W. Riley
Secretary

Office of Educational Research and Improvement
C. Kent McGuire
Assistant Secretary

National Center for Education Statistics
Gary W. Phillips
Acting Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to:

National Center for Education Statistics
Office of Educational Research and Improvement
U.S. Department of Education
555 New Jersey Avenue NW
Washington, DC 20208–5574

February 2000

The NCES World Wide Web Home Page is: ***http://nces.ed.gov***
The NCES World Wide Web Electronic Catalog is: ***http://nces.ed.gov/pubsearch/index.asp***

Suggested Citation
U.S. Department of Education. National Center for Education Statistics. *Dropout Rates in the United States: 1998*, NCES 2000–022, by Phillip Kaufman, Jin Y. Kwon, and Steve Klein. Project Officer: Christopher D. Chapman. Washington, DC: 2000.

For ordering information on this report, write:

U.S. Department of Education
ED Pubs
P.O. Box 1398
Jessup, MD 20794–1398

or call toll free 1–877–4ED–Pubs.

Content Contact:
Christopher D. Chapman
(202) 219–4182

EXECUTIVE SUMMARY

This report is the eleventh in a series of National Center for Education Statistics reports on high school dropout and completion rates. It presents data on rates in 1998, the most recent year for which data are available, and includes time series data on high school dropout and completion rates for the period 1972 through 1998. In addition to extending time series data reported in earlier years, this report examines the characteristics of high school dropouts and high school completers in 1998.

Table A—Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school, by race–ethnicity: October 1998

Dropout and completion measures	Total[1]	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander
Percentage of youth ages 15–24 who dropped out of grades 10–12, October 1997 to October 1998	4.8	3.9	5.2	9.4	—
Percentage of youth ages 16–24 who were dropouts in 1998	11.8	7.7	13.8	29.5	4.1
Percentage of youth ages 18–24 who were high school completers in 1998[2]	84.8	90.2	81.4	62.8	94.2

—Sample size too small for reliable estimate.

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives are included in the total but are not shown separately.

[2]Excludes those still enrolled in high school.

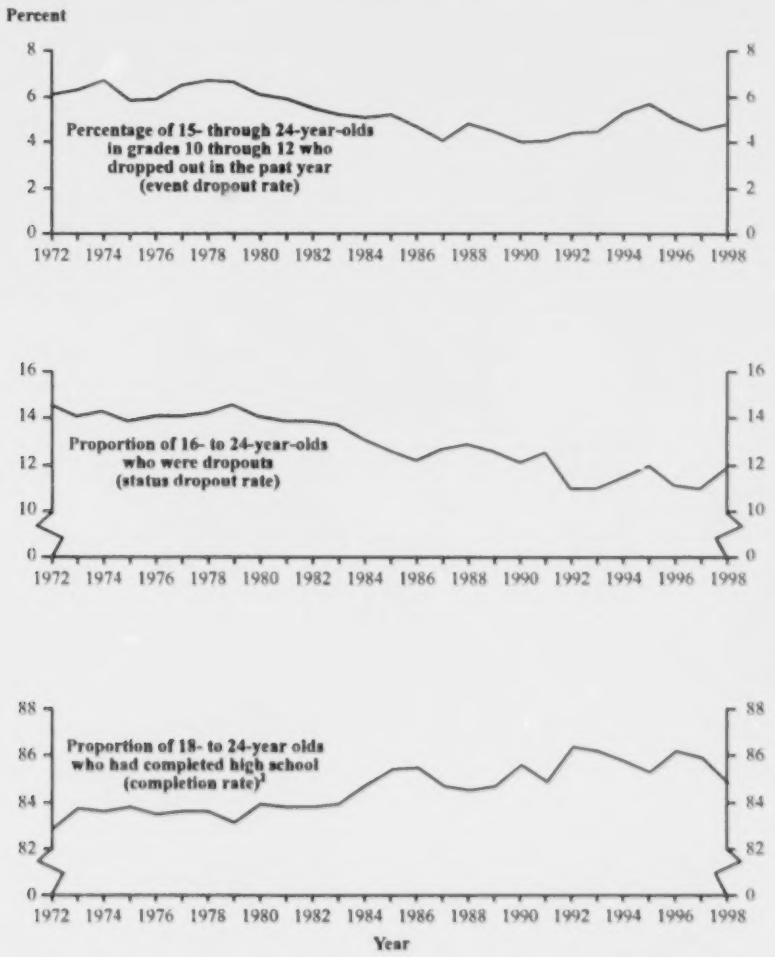
SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1998.

Event Dropout Rates

Event dropout rates for 1998 describe the proportion of youth ages 15 through 24 who dropped out of grades 10–12 in the 12 months preceding October 1998. Demographic data collected in the Current Population Survey (CPS) permit event dropout rates to be calculated across various individual characteristics, including race–ethnicity, sex, region of residence, and income level.

- About 5 out of every 100 young adults enrolled in high school in 1997 left school before October 1998 without successfully completing a high school program. This estimate of 4.8 percent was similar to the estimates reported over the last 10 years, but lower than those reported in the early 1970s (table A, figure A, and table 1).

Figure A—Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school: October 1972 through October 1998[1]


Percent
Percentage of 15- through 24-year-olds in grades 10 through 12 who dropped out in the past year (event dropout rate)
Proportion of 16- to 24-year-olds who were dropouts (status dropout rate)
Proportion of 18- to 24-year olds who had completed high school (completion rate)[2]
Year
1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998

[1]Numbers for years 1987 through 1998 reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items. Numbers for years 1992 through 1998 reflect new wording of the educational attainment item in the CPS beginning in 1992. Numbers for years 1994 through 1998 reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in population controls used in the 1990 Census-based estimates, with adjustment for undercounting in the 1990 Census.

[2]Excluding those still enrolled in high school.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

- Hispanic students were more likely than white and black students to leave school before completing a high school program: in 1998, 9.4 percent of Hispanic students were event dropouts, compared with 3.9 percent of white and 5.2 percent of black students. The event dropout rates of white students were not significantly different from those of black students (table 1).

- In 1998, young adults living in families with incomes in the lowest 20 percent of all family incomes were four times as likely as their peers from families in the top 20 percent of the income distribution to drop out of high school (table 1).

- Although dropout rates were highest among students age 19 or older, about two-thirds (69 percent) of the current-year dropouts were ages 15 through 18; moreover, about one third (34 percent) of the 1998 dropouts were ages 15 through 17 (table 1).

Status Dropout Rates

Over the last decade, between 350,000 and 550,000 10th- through 12th-grade students left school each year without successfully completing a high school program (Table B1). Each year some of these young adults return to high school or enter an alternative certification program, and others pass out of this age group. Status dropout rates represent the proportion of young adults ages 16 through 24 who are out of school and who have not earned a high school credential.

- In October 1998, some 3.9 million young adults were not enrolled in a high school program and had not completed high school. These youths accounted for 11.8 percent of the 33 million 16- through 24-year-olds in the United States in 1998 (table A, figure A, and table 3). As noted with event rates, this estimate is consistent with the estimates reported over the last 10 years, but lower than those reported in the early 1970s.

- The status dropout rates of whites remain lower than those of blacks, but over the past quarter of a century, the difference between the rates of whites and blacks has narrowed (figure 2). In addition, Hispanic young adults in the United States continue to have higher status dropout rates than do either their white or black counterparts (figure 2).

- In 1998, 4.1 percent of Asian/Pacific Islander young adults were status dropouts, compared with 29.5 percent of Hispanics, 13.8 percent of blacks, and 7.7 percent of whites (table 3).

- Forty-four percent of Hispanic young adults born outside the 50 states or the District of Columbia were high school dropouts. Although the dropout rates of Hispanics born in the United States were lower than those of their Hispanic peers who were non-U.S.-born, they were higher than the dropout rates of non-Hispanics born in the United States (table 3).

High School Completion Rates

The high school completion rate represents the proportion of 18- through 24-year-olds who have completed a high school diploma or an equivalent credential, including a General Educational Development (GED) credential.

- In 1998, about 85 percent of all 18- through 24-year-olds not enrolled in high school had completed high school, a slight increase since the early 1970s (figure A and table A7).

- High school completion rates have increased for white and black young adults since the early 1970s, with rates of 90.2 percent for whites and 81.4 percent for blacks in 1998. However, Hispanic young adults have not shared in this improvement: 62.8 percent were reported as having completed high school in 1998 (figure 3 and table 4). In addition, Asian/Pacific Islander young adults in 1998 were more likely than their white, black, and Hispanic peers to complete high school.

Method of High School Completion

Most young adults complete a regular diploma and graduate from high school; others complete high school by an alternative route, such as passing the GED test.

- During the 1990s, the percentage of young adults not enrolled in high school who have earned a high school credential has remained relatively unchanged; however, the percentage with an alternative certification increased from 4.9 percent in 1990 to 10.1 percent in 1998, and the percentage with regular diplomas decreased by a similar amount (table 6).

FOREWORD

The National Center for Education Statistics (NCES) collects and publishes information on the condition of education in the United States. Under mandate from the Hawkins-Stafford Elementary and Secondary School Improvements Amendment of 1988 (P.L. 100–297), NCES released the first annual report on school dropouts in 1989. Although law no longer requires the reporting of dropout statistics, this report has been continued because of the importance of charting dropout behavior among America's youth.

This report is the eleventh in the series of annual dropout reports from NCES. This report builds on the previous sequence of ten reports that is the product of the work of both Mary Frase and Marilyn McMillen and reflects their joint dedication to producing accurate and useful information on high school dropouts and completers.

The current report presents data for 1998 on high school dropout rates, and examines high school completion and graduation rates. In addition to extending time series data reported in earlier years, this report focuses on the characteristics of high school dropouts and high school completers in 1998.

The report is based on the best and most current national data available at this time. It utilizes the data from the Current Population Survey conducted by the Bureau of the Census to develop national event and status dropout rates for young adults of various ages. As a part of an ongoing effort to expand and improve data collected about dropouts, NCES initiated a dropout statistics collection in the 1991–92 school year as a component of the Common Core of Data; data from the fifth year of that collection are included in this report for most states. Current Population Survey data are also used to develop national and state-specific high school completion rates.

I hope the information in this report will be useful in discussions about this critical national issue.

Gary W. Phillips
Acting Commissioner
National Center for Education Statistics

ACKNOWLEDGMENTS

Many individuals made substantial contributions to the preparation of this report. This report was prepared under the direction of Valena Plisko, Associate Commissioner for the Early Childhood, International and Cross-cutting Studies Division, NCES.

Recognition is extended to Rosalind Bruno of the Education and Social Stratification Branch, Population Division, Bureau of the Census for providing access to CPS data on which this report is based. Special recognition goes to Marilyn M. McMillen and Mary Frase, without whose contributions as an author of the 3rd to 10th annual dropout reports this report would not be possible. Without the efforts of Beth Young at NCES, the CCD dropout data collection would not continue to expand; we thank them for their hard work.

We would also like to extend our gratitude to Lisa Richards Hone and the American Council on Education for supplying data on GED test takers and certificates issued.

Without the assistance of Barbara Kridl, Leslie Retallick, and Francesca Tussing of MPR Associates, this report could not have been prepared. They provided invaluable analytical, editorial, graphic, and production assistance.

The report was reviewed by Beth Young, Kathryn Chandler, and Val Plisko from NCES; Gladys Martinez from the U.S. Bureau of the Census; and Mary Frase from the National Science Foundation. While, of course, we are responsible for any remaining flaws, their efforts and contributions are greatly appreciated.

Table of Contents

Page

Executive Summary iii
Foreword vii
Acknowledgments viii
Table of Contents ix
List of Tables x
List of Figures xiv

Introduction 1

Event and Status Dropout Rates 2
- Types of Dropout Rates 2
- Event Dropout Rates 3
  - Income 6
  - Race–Ethnicity 7
  - Age and Sex 7
  - Region and State 8
- Status Dropout Rates 10
  - Race–Ethnicity 11
  - Hispanic Dropout Rates 12
  - Age and Sex 14
  - Region 14

High School Completion Rates 15
- High School Completion Rates 15
  - Race–Ethnicity 16
  - Age and Sex 18
  - Region and State 19
- Method of High School Completion 21

Conclusions 25

Appendices
- A Standard Error and Time Series Tables 27
- B Supplemental Tables 45
- C Technical Notes 61

LIST OF TABLES

Table **Page**

Text tables

A Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school, by race–ethnicity: October 1998 iii

1 Event dropout rates and number and distribution of 15- through 24-year-olds who dropped out of grades 10–12, by background characteristics: October 1998 5

2 Event dropout rates for grades 9–12, by state: 1993–94, 1994–95, 1995–96, and 1996-97 9

3 Status dropout rates and number and distribution of dropouts of 16- through 24-year-olds, by background characteristics: October 1998 13

4 High school completion rates and number and distribution of completers of 18- through 24-year-olds not currently enrolled in high school or below, by background characteristics: October 1998 18

5 High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by state: October 1990–92, 1993–95, and 1996–98 20

6 High school completion rates and method of completion of 18- through 24-year-olds not currently enrolled in high school or below: October 1988 through October 1998 23

Appendix Tables

A1 Standard errors for table A: Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school, by race–ethnicity: October 1998 29

A2 Standard errors for table 1: Event dropout rates and number and distribution of 15- through 24-year-olds who dropped out of grades 10–12, by background characteristics: October 1998 30

Table		Page
A3	Standard errors for table 3: Status dropout rates and number and distribution of dropouts of 16- through 24-year-olds, by background characteristics: October 1998	31
A4	Standard errors for table 4: High school completion rates and number and distribution of completers of 18- through 24-year-olds not currently enrolled in high school or below, by background characteristics: October 1998	32
A5	Standard errors for table 5: High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by state: October 1990–92, 1993–95, and 1996–98	33
A6	Standard errors for table 6: High school completion rates and method of completion of 18- through 24-year-olds not currently enrolled in high school or below: October 1988 through October 1998	35
A7	Supporting data for figure A: Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school: October 1972 through October 1998	36
A8	Standard errors for figure A: Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school: October 1972 through October 1998	37
A9	Supporting data for figure 1: Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by family income: October 1972 through October 1998	38
A10	Standard errors for figure 1: Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by family income: October 1972 through October 1998	39
A11	Supporting data for figure 2: Status dropout rates of 16- through 24-year-olds, by race–ethnicity: October 1972 through October 1998	40
A12	Standard errors for figure 2: Status dropout rates of 16- through 24-year-olds, by race–ethnicity: October 1972 through October 1998	41
A13	Supporting data for figure 3: High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by race-ethnicity: October 1972 through October 1998	42

Table		Page
A14	Standard errors for figure 3: High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by race-ethnicity: October 1972 through October 1998	43
B1	Event dropout rates and number of dropouts and population of 15- through 24-year-olds who were enrolled: October 1990 through October 1998	47
B2	Standard errors for table B1: Event dropout rates and number of dropouts and population of 15- through 24-year-olds who were enrolled: October 1990 through October 1998	48
B3	Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by sex and race–ethnicity: October 1972 through October 1998	49
B4	Standard errors for table B3: Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by sex and race–ethnicity: October 1972 through October 1998	50
B5	Rate and number of status dropouts and population of 16- through 24-year-olds: October 1990 through October 1998	51
B6	Standard errors for table B5: Rate and number of status dropouts: October 1990 through October 1998	52
B7	National Education Longitudinal Study of 1988 (NELS:88) 8th- through 12th-grade cohort dropout rates, by sex and race–ethnicity: 1992 and 1994	53
B8	Standard errors for table B7: National Education Longitudinal Study of 1988 (NELS:88) 8th- through 12th-grade cohort dropout rates, by sex and race–ethnicity: 1992 and 1994	54
B9	High School and Beyond (HS&B) and National Education Longitudinal Study of 1988 (NELS:88) 10th- through 12th-grade cohort dropout rates, by background characteristics: August 1982 and 1992	55
B10	Standard errors for table B9: High School and Beyond (HS&B) and National Education Longitudinal Study of 1988 (NELS:88) 10th- through 12th-grade cohort dropout rates, by background characteristics: August 1982 and 1992	56
B11	High school completion rates of 18 through 24-year-olds not currently enrolled in high school or below, by state: October 1989-90 through 1996–98	57
B12	Standard errors for table B11: High school completion rates of 18 through 24-year-olds not currently enrolled in high school or below, by state: October 1989-90 through 1996–98	59

Table **Page**

C1 Average weights and population estimates using 1980 and 1990 Census–based weights for all 15- through 24-year-olds, by race–ethnicity: October 1993 70

C2 Estimated event and status dropout rates based on 1980 and 1990 Census weights: October 1993 71

C3 Number of 18- through 24-year-olds who received a GED in given year: 1990 through 1998 73

C4 Percent distribution of event dropouts for 15- through 24-year-olds, according to household type, by family income: October 1997 76

LIST OF FIGURES

Figure		Page
A	Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school: October 1972 through October 1998	iv
1	Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by family income: October 1972 through October 1998	4
2	Status dropout rates of 16- through 24-year-olds, by race–ethnicity: October 1972 through October 1998	10
3	High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by race–ethnicity: October 1972 through October 1998	16
C1	Number of 18- through 24-year-olds who received a GED in given year: 1990 through 1998	73

INTRODUCTION

Over the past fifty years, there has been a dramatic change in the value of a high school education. A high school degree was considered a valued asset in the labor market during the 1950's. But by the 1970's, with more students completing high school, a high school diploma served as a gateway to many promising career opportunities. In recent years, advances in technology have fueled the demand for a highly skilled labor force, transforming a high school education into a minimum requirement for entry into the labor market.

Because high school completion has become a requirement for entering additional education, training, or the labor force, the economic consequences of leaving high school without a diploma are severe. On average, dropouts are more likely to be unemployed than high school graduates and to earn less money when they eventually secure work.[1] High school dropouts are also more likely to receive public assistance than high school graduates who do not go on to college.[2] This increased reliance on public assistance is likely due, at least in part, to the fact that young women who drop out of school are more likely to have children at younger ages and more likely to be single parents than high school graduates.[3] The individual stresses and frustrations associated with dropping out have social implications as well: dropouts make up a disproportionate percentage of the nation's prison and death row inmates.[4]

Secondary schools in today's society are faced with the challenge of increasing curricular rigor to strengthen the knowledge base of high school graduates, while at the same time increasing the proportion of all students who successfully complete a high school program. Monitoring high school dropout and completion rates provides one measure of progress toward meeting these goals.

This is the eleventh annual dropout report from the National Center for Education Statistics (NCES). This report spans the 27-year time period from 1972 through 1998 and focuses primarily on updates to annual time series data. Data from the October 1998 Current Population Survey (CPS) of the U.S. Census Bureau are used to compute national high school dropout and completion rates and rates by background characteristics, such as sex, race–ethnicity, family income, and region of the country. State-level data from the CPS are used to produce estimates of high school completion rates by state. In addition, NCES data from the Common Core of Data (CCD) are used to provide estimates of dropout rates by state for many states.

---

[1]U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 1999*, NCES 99-022 (Washington, D.C.: U.S. Government Printing Office, 1999), Indicators 11 and 12.

[2]U.S. Department of Education, National Center for Education Statistics, *The Condition of Education 1998*, NCES 98-013 (Washington, D.C.: U.S. Government Printing Office, 1998), Indicator 34.

[3]U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1994*, NCES 96-863, by M. McMillen and P. Kaufman (Washington, D.C.: U.S. Government Printing Office, 1996).

[4]Estimates indicate that one-quarter of federal and one-half of state prison inmates are high school dropouts. See U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, *Comparing Federal and State Prison Inmates, 1991*, NCJ-145864, by C.W. Harlow (Washington, D.C.: U.S. Government Printing Office, September 1994).

EVENT AND STATUS DROPOUT RATES

Event, status, and cohort dropout rates each provide a different perspective on the student dropout population. The National Center for Education Statistics presents definitions and data for all three types of dropout rates in order to provide a more comprehensive picture of the dropout problem in the United States. High school graduation and completion rates conclude the profile of high school outcomes for young adults in the United States.

Types of Dropout Rates

- **Event** rates describe the proportion of students who leave school each year without completing a high school program. This annual measure of recent dropout occurrences provides important information about how effective educators are in keeping students enrolled in school.

- **Status** rates provide cumulative data on dropouts among all young adults within a specified age range. Status rates are higher than event rates because they include all dropouts ages 16 through 24, regardless of when they last attended school. Since status rates reveal the extent of the dropout problem in the population, these rates also can be used to estimate the need for further education and training designed to help dropouts participate fully in the economy and life of the nation.

- **Cohort** rates measure what happens to a group of students over a period of time. These rates are based on repeated measures of a cohort of students with shared experiences and reveal how many students starting in a specific grade drop out over time. Typically, data from longitudinal studies provide more background and contextual information on the students who drop out than are available through the CPS or CCD data collections.[5]

---

[5]Cohort data are available only sporadically. The most recent information available is from the August 1994 Third Follow-up of the National Education Longitudinal Study of 1988, which contains data on a cohort of the eighth-grade class of 1988. These data were previously reported in U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1996*, NCES 98-250, by M. McMillen and P. Kaufman (Washington D.C.: U.S. Government Printing Office, 1998), and they can be found in appendix B, tables B7–B10.

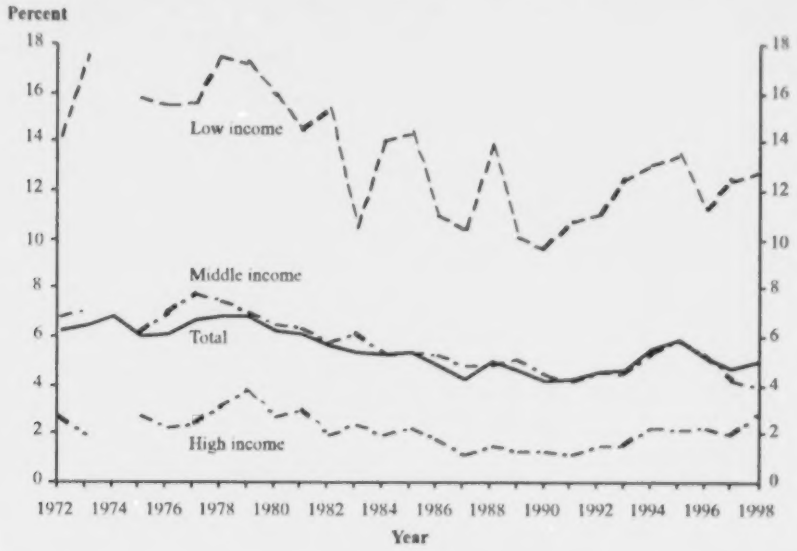
Event Dropout Rates

Event rates calculated using the October 1998 CPS data measure the proportion of students who dropped out between October 1997 and October 1998.[6] These dropouts are 15- through 24-year-olds who were enrolled in high school in October 1997, but had not completed high school and were not enrolled in grades 10–12 a year later. According to this definition, a young person could complete high school by either earning a high school diploma or receiving an alternative credential such as a GED. By October 1998, approximately 5 out of every 100 young adults (4.8 percent) who were enrolled in high school in October 1997 were not in school and had not successfully completed a high school program (table 1).[7]

[6]Specifically, the numerator of the event rate for 1998 is the number of persons 15 through 24 years old surveyed in 1998 who were enrolled in high school in October 1997, were not enrolled in October 1998, and also did not complete high school (i.e., had not received a high school diploma or an equivalency certificate) between October 1997 and October 1998. The denominator of the event rate is the sum of the dropouts (i.e., the numerator) and the number of all persons 15 through 24 years old who attended grades 10–12 in 1997 and were still enrolled in 1998 or had graduated or completed high school.

[7]Standard errors for all tables and figures are provided in appendix A.

Figure 1—Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by family income:[1] October 1972 through October 1998[2]



[1]Low income is defined as the bottom 20 percent of all family incomes for the year; middle income is between the 20th and 80th percentiles of all family incomes; and high income is the top 20 percent of all family incomes. See appendix C of this report for a full definition of family income.

[2]Numbers for years 1987 through 1998 reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items. Numbers for years 1992 through 1998 reflect new wording of the educational attainment item in CPS beginning in 1992. Numbers for years 1994 through 1998 reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in population controls used in the 1990 Census-based estimates, with adjustment for undercounting in the 1990 Census. See appendix C for a fuller description of the impact of these changes on reported rates.

NOTE: Data on family income are missing for 1974.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table 1—Event dropout rates and number and distribution of 15- through 24-year-olds who dropped out of grades 10–12, by background characteristics: October 1998

Characteristic	Event dropout rate (percent)	Number of event dropouts (thousands)	Population enrolled (thousands)	Percent of all dropouts	Percent of population
Total	4.8	479	10,079	100.0	100.0
Sex					
Male	4.6	237	5,117	49.4	50.8
Female	4.9	243	4,962	50.6	49.2
Race–ethnicity[1]					
White, non-Hispanic	3.9	266	6,778	55.6	67.2
Black, non-Hispanic	5.2	84	1,602	17.5	15.9
Hispanic	9.4	115	1,221	24.0	12.1
Family income[2]					
Low	12.7	185	1,454	38.5	14.4
Middle	3.8	215	5,725	44.9	56.8
High	2.7	80	2,900	16.6	28.8
Age[3]					
15 through 16	2.3	66	2,810	13.7	27.9
17	2.8	98	3,432	20.4	34.1
18	5.9	166	2,791	34.6	27.7
19	10.6	85	802	17.8	8.0
20 through 24	26.5	65	245	13.5	2.4
Region					
Northeast	3.8	70	1,862	14.7	18.5
Midwest	3.6	90	2,494	18.8	24.7
South	5.1	177	3,430	36.9	34.0
West	6.2	142	2,294	29.7	22.8

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

[2]Low income is defined as the bottom 20 percent of all family incomes for 1998; middle income is between the 20th and 80th percentiles of all family incomes; and high income is the top 20 percent of all family incomes. See appendix C of this report for a full definition of family income.

[3]Age when a person dropped out may be 1 year younger, because the dropout event could occur at any time over a 12-month period.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1998.

Over the past quarter of a century, annual estimates of the event dropout rate have fluctuated between 4.0 and 6.7 percent (figure 1 and table A9). However, overall there has been a downward trend in event dropout rates over the entire period, from 6.1 percent in 1972 to 4.8 percent in 1998.[8] The percentage of young adults who left school each year without successfully completing a high school program decreased from 1972 through 1987. Despite year-to-year fluctuations, the percentage of students dropping out of school each year has stayed relatively unchanged since 1987. Changes in data collection and estimation procedures coincided with an increase in the rates from 1991 through 1995 (see appendix C). Nevertheless, over the period from 1991 through 1998, there was no consistent upward or downward trend in event rates.

Income

The CPS includes family income data that can be used to provide information about how socioeconomic background is related to the decisions of young adults to drop out of school. Of course, the range of factors that may affect the life decisions of young adults extend beyond the economic conditions associated with family income; however, in the absence of additional measures, family income serves as a good indicator for the other social and economic factors that are likely to be related to a young adult's decision to stay in school.[9]

In 1998, 12.7 percent of students from families in the lowest 20 percent of the income distribution dropped out of high school; by way of comparison, 3.8 percent in the middle 60 percent of the income distribution dropped out, as did 2.7 percent of students from families with incomes in the top 20 percent (table 1). [2]

Since the mid-1970s, there has been an overall downward trend in the annual estimates of event dropout rates for young adults living in families of low, middle and high income levels (figure 1). Most of the declines in dropout rates for all income groups occurred in the 1970s and 1980s. However, in the 1990s, event dropout rates for all income groups stabilized. For example, event dropout rates for low-income youth approached 10 percent in 1989 and 1990; since 1990, dropout rates have fluctuated between 11 and 13 percent. Event rates for young adults living in middle- and high-income families have also shown no upward or downward trend since 1990, with rates fluctuating between 4 and 6 percent, and 1 and 3 percent respectively.

---

[8]The statistical significance of these comparisons was assessed with Student's *t*-test with a Bonferroni correction for multiple comparisons. Time trends noted in this report were assessed using weighted least squares regressions. For a full discussion of the statistical methods used in this report, see appendix C. All comparisons in this report are statistically significant at the ≤ 0.05 level.

[9]The variable used to assess family income is derived from a single question asked of the household respondent in the October CPS. In some cases, a 15- through 24-year-old is unrelated to the household head or is the head of the household (or spouse/companion of the head). Because family income for a 15- through 24-year-old is defined as the current household income of the family of the household respondent, reported incomes may not reflect the family background of all youth. See appendix C for a more detailed discussion.

Income is only one of a number of closely linked factors that may be related to a student's decision to drop out of school; others include race–ethnicity, age, sex, and geographic region of residence. Analyses of all the specific interactions among intervening variables that mediate the dropout decision are beyond the scope of this report. Instead, this report reviews some of the primary factors that are associated with higher event dropout rates.[10]

Race–Ethnicity

The 1998 CPS data confirm some findings in earlier reports about the strong association between race–ethnicity and the likelihood of dropping out of school. In particular, cohort studies of national longitudinal data for American high school students, such as the High School and Beyond study sponsored by NCES, show that Hispanics and blacks are at greater risk of dropping out than whites, with Hispanics at a greater risk of dropping out than either white or black students.[11] More recently, analyses of data from the NCES National Education Longitudinal Study also confirm these patterns.[12]

Data from the October 1998 CPS also verify this pattern for Hispanics, showing an event dropout rate of 9.4 percent for Hispanic students, compared with 3.9 percent for white students and 5.2 percent for black students (table 1). However, the event dropout rates of white and black students did not differ significantly.[13]

Age and Sex

In October 1998, youth over the age of 18 were over represented in the dropouts ages 15 though 24. Thus, students who pursue a high school program beyond the traditional ages are at an increased risk of dropping out of school (table 1). Event dropout rates for younger enrollees are substantially lower (that is, 2.3 percent for 15- and 16-year-olds and 2.8 percent for 17-year-olds compared with 5.9 percent for 18-year-olds, 10.6 percent for 19-year-olds, and 26.5 percent for 20- through 24-year-olds).

Although dropout rates were highest among students age 19 or older, about two-thirds (69 percent) of the current-year dropouts were ages 15 through 18 (table 1). About one-third (34 percent) of all young adults who left school between October 1997 and October 1998 were ages 15, 16, and 17 in October 1998. These youths left school before reaching the typical age of school completion.

---

[10]For coverage on the interaction of race–ethnicity with other factors, the interested reader is referred to G. Natriello, ed., *School Dropouts: Patterns and Policies* (New York: Teachers College Press, 1987). For an ethnographic depiction of these factors at work, see M. Fine, *Framing Dropouts* (New York: State University of New York Press, 1991).

[11]See R. Ekstron, M. Goertz, J. Pollack, and D. Rock, "Who Drops Out of High School and Why? Findings from a National Study," in *School Dropouts: Patterns and Policies* (1987), 52–69. For dropout data using the National Education Longitudinal Study, see tables B9 and B10 in M. McMillen and P. Kaufman, *Dropout Rates in the United States: 1994* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1996).

[12]M. McMillen and P. Kaufman, *Dropout Rates in the United States: 1996* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1997.

[13]While these differences appear to be relatively large, they are not statistically significant at the 0.05 level due to relatively large standard errors.

The event dropout rates for male and female students were similar in 1998. Approximately five percent of young adult males and females ages 15 through 24 enrolled in high school in October 1997 had dropped out of school by October 1998.

Region and State

In 1998, event dropout rates across all four regions of the country ranged from 6.2 in the West and 5.1 in the South to 3.8 in the Northeast and 3.6 in the Midwest (table 1). Students living in the West were more likely than those living in the Midwest to become dropouts. However, they were equally as likely as students living in the Northeast and the South to become dropouts in 1998.

For the past 5 years, the Common Core Data (CCD) universe collection at NCES has included a dropout component in the agency-level nonfiscal data collection. Currently, NCES, through the National Cooperative for Elementary and Secondary Statistics and the CCD collection, is working with states and school districts to develop this national database of public school dropout rates. The number of participating states that report using consistent data definitions and collection procedures has increased from 14 states in the 1991–92 school year to 26 states for the 1996–97 school year (table 2).[14] Furthermore, each year a number of additional states submit data that do not meet the specified definitions and collection procedures. For example, in 1996-97 a total of 47 states submitted dropout data to the CCD. A recent analysis of the data from all participating states has led NCES to conclude that the possible discrepancies introduced by the 12 states that reported dropouts from July through June, rather than October through September, are small enough to justify the inclusion of the dropout data from these states. This brings the number of states in table 2 to 38 including the District of Columbia. Event dropout rates among these states ranged from 2.7 percent in North Dakota and Wisconsin to 11.6 percent in Louisiana. Once all states are participating fully in this data collection, event data for sex, race–ethnicity, and grades 9–12 will be aggregated at the state and national levels.

[14] For event dropout rates by state from the 1991-1992 school year, see P. Kaufman, *Dropout Rates in the United States: 1993* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, 1994), table 29.

Table 2—Event dropout rates for grades 9–12, by state: 1993–94 to 1996–97

State	Event dropout rate (percent)			
	1993–94	1994–95	1995–96	1996–97
Alabama[1]	—	—	—	5.3
Alaska	—	—	—	4.9
Arizona[1]	—	—	—	10.0
Arkansas	5.3	4.9	4.1	5.0
Colorado[1]	—	—	—	6.0
Connecticut	4.9	5.0	4.8	3.9
Delaware	4.6	4.6	4.5	4.5
District of Columbia	9.6	10.6	—	—
Georgia	8.7	9.0	8.5	8.2
Idaho[1]	—	—	—	7.2
Illinois[1]	—	—	—	8.8
Iowa	3.2	3.5	3.1	2.9
Kansas	5.0	5.1	4.7	4.6
Louisiana	4.7	3.5	11.6[2]	11.6[2]
Maine	3.1	3.4	3.1	3.2
Maryland[1]	—	—	—	4.9
Massachusetts	3.7	3.6	3.3	3.4
Minnesota	5.1	5.2	5.3	5.5
Mississippi	6.1	6.4	6.2	6.0
Missouri	7.1	7.1	6.6	5.8
Montana	—	—	5.6	5.1
Nebraska	4.6	4.5	4.5	4.3
Nevada	9.8	10.3	9.6	10.2
New Jersey[1]	—	—	—	3.7
New Mexico	8.1	8.5	—	7.5
New York	4.0	4.1	3.7	3.4
North Dakota	2.7	2.5	2.5	2.7
Ohio	—	5.3	5.4	5.2
Pennsylvania	3.8	4.1	4.0	3.9
Rhode Island	4.9	4.6	4.6	4.7
South Dakota[1]	—	—	—	4.5
Tennessee[1]	—	—	—	5.1
Texas	3.7	2.7	—	3.6
Utah	—	3.6	4.4	4.5
Vermont[1]	—	—	—	5.0
Virginia[1]	—	—	—	4.6
West Virginia	—	4.2	3.8	4.1
Wisconsin[1]	—	—	—	2.7
Wyoming	—	6.7	5.7	6.2

—Data not available.

[1]This state reported on an alternative July through June cycle rather than the specified October through September cycle.

[2]Effective in the 1995–96 school year, Louisiana changed its dropout data collection from school-level aggregate counts reported to districts to an individual student-record system. The apparent increase in the dropout rate is partly due to the increased ability to track students.

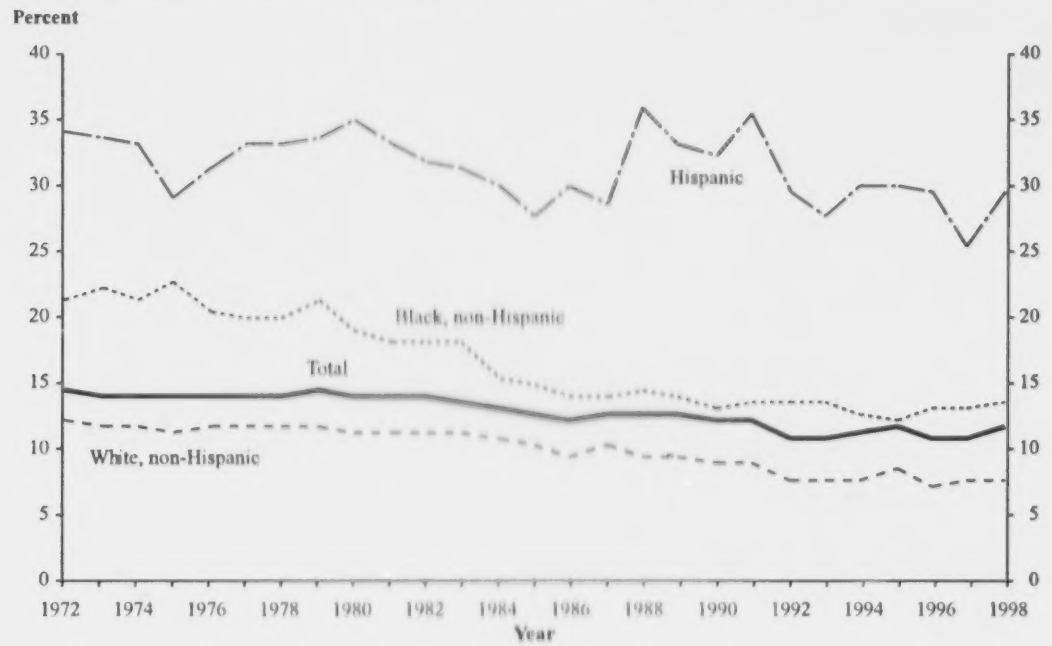
NOTE: Among the 38 states and District of Columbia that reported dropouts in 1996-97, 26 said that they adhered exactly to the standard definition and collection procedures. See Appendix C for a detailed discussion of the CCD dropout definition.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "Local Education Agency Universe Survey" (various years).

Status Dropout Rates

The cumulative effect of hundreds of thousands of young adults leaving school each year without successfully completing a high school program translates into several million young adults who are out of school but lacking a high school credential. Each year over the last decade, this number has exceeded 3 million (appendix B, table B5). In October 1998, there were 3.9 million 16- through 24-year-olds who were not enrolled in a high school program and had not completed high school (table 3). Overall, in 1998, 11.8 percent of the 33 million 16- through 24-year-olds in the United States were in this group. As noted with event rates, this estimate is consistent with the estimates reported over the last 10 years, but lower than those reported in the early 1970s.

Figure 2—Status dropout rates of 16- through 24-year-olds, by race–ethnicity:[1] October 1972 through October 1998[2]



[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately. In addition, the erratic nature of the Hispanic status rate reflects, in part, the small sample size of Hispanics in the CPS.

[2]Numbers for years 1987 through 1998 reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items. Numbers for years 1992 through 1998 reflect new wording of the educational attainment item in the CPS beginning in 1992. Numbers for years 1994 through 1998 reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in population controls used in the 1990 Census-based estimates, with adjustment for undercounting in the 1990 Census. See appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Race–Ethnicity

Over the past quarter of a century, the status dropout rates for white young adults have persisted at levels that are lower than the rates observed for either black or Hispanic young adults (figure 2 and table A11). However, over the time period, the percentages of white and black young adults who were out of school without a high school credential have declined by nearly 40 percent in each group. Since the dropout rates for black young adults have been higher than those for white young adults, the comparable rates of change have resulted in a narrowing of the gap between the rates for blacks and whites.

The percentage of Hispanic young adults who were out of school without a high school credential has remained higher than that of blacks and whites in every year throughout this 27-year period.[15] During these years, when immigration patterns contributed to substantial changes in the size and composition of the Hispanic population, the status dropout rates for Hispanic young adults did not decline. Over most of the 27-year period, close to one-third of the 16- through 24-year-old Hispanics in the United States were reported as out of school and lacking a high school credential.[16]

Due to the relatively small sample sizes in previous years, Asians/Pacific Islanders have not been shown separately. This is the first year in which Asians/Pacific Islanders are being presented as a distinct racial–ethnic group. In 1998, Asians/Pacific Islanders, who represented 4.1 percent of the total 16- through 24-year-old population, had a status dropout rate of 4.1 percent, the lowest rate among all groups. In comparison, 7.7 percent of white young adults ages 16 through 24 were out of school and without a high school credential in 1998, accounting for 1.7 million of the 3.9 million dropouts (table 3). Even though white young adults were relatively less likely to be status dropouts in 1998 than their black and Hispanic peers, whites constituted the largest group of status dropouts (43.0 percent).

While Hispanics and blacks represented similar proportions of the young adult population (15.1 percent and 14.6 percent, respectively), Hispanics were disproportionally represented among status dropouts in 1998 (37.7 percent of all dropouts). A total of 1.5 million Hispanics were dropouts in 1998, accounting for 29.5 percent of all Hispanic young adults in this age group. In comparison, about 700,000

---

[15]See, for example, G. Brown, N. Rose, S. Hill, and M. Olivas, *The Condition of Education for Hispanic Americans* (Washington, D.C.: U.S. Department of Education, 1980); U.S. Department of Education, Office of Bilingual Education and Minority Language Affairs, *An Analysis of Language Minority and Limited English Proficient Students from NELS:88*, by F. Bennici and W. Strang (Washington, D.C: U.S. Government Printing Office, August 1995); U.S. Department of Education, *Characteristics of Secondary-School-Age Language Minority and Limited English Proficient Youth*, by W. Strang, M. Winglee, and J. Stunkard (Washington, D.C.: U.S. Government Printing Office, 1993); U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1990*, NCES 91-053, by P. Kaufman and M. McMillen (Washington, D.C.: U.S. Government Printing Office, 1991); and U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1997*, NCES 99-082, by P. Kaufman, S. Klein and M. Frase (Washington, D.C.: U.S. Government Printing Office, 1999).

[16]The erratic nature of the Hispanic status rate reflects, in part, the small sample size of Hispanics in the CPS.

black young adults, or 13.8 percent of the total black population of 16- through 24-year-olds, were dropouts in the corresponding period.

Hispanic Dropout Rates

High Hispanic dropout rates are partly attributable to relatively greater dropout rates among Hispanic immigrants. Data from the 1998 CPS appear to substantiate earlier findings (table 3).[17] In fact, the status dropout rate of 44.4 percent for Hispanic 16- through 24-year-olds born outside the 50 states or the District of Columbia was at least double the rate of 20.5 percent for Hispanic youths born in the United States with at least one parent born outside the United States, and the rate of 15.8 percent for Hispanic youths with both parents born in the United States.[18]

In 1998, dropout rates for Hispanic youths born in the United States were lower than the dropout rates for Hispanic youths born outside the United States. However, regardless of place of birth, Hispanic young adults were more likely to be dropouts than their non-Hispanic peers.

Data from 1995 show that more than half of the foreign-born Hispanic youths who were dropouts had never enrolled in a U.S. school, and 80 percent of these young adults were reported as either speaking English "not well" or "not at all."[19] Some of the young Hispanic immigrants who do not enroll in school in the United States may have entered the country beyond what is considered "normal" high school age, and some may have come to the United States in search of employment rather than education. However, the data also suggest that language may be a barrier to participation in U.S. schools. Regardless of the reasons, for the large proportion of Hispanic young adults without a high school credential, the impact is the same: whether they were born in the 50 states or the District of Columbia or elsewhere and whether or not they enrolled in U.S. schools, these young adults probably do not have the basic level of education thought to be essential in today's economy.

---

[17]U.S. Department of Education. National Center for Education Statistics, *Dropout Rates in the United States: 1995*, NCES 97-473, by M. McMillen, P. Kaufman, and S. Klein (Washington, D.C.: U.S. Government Printing Office, 1997).

[18]For the sake of simplicity, the terms "foreign born" and "born outside the United States" are used in the text to refer to anyone born outside the 50 states or the District of Columbia, and the term "born in the United States" is used to refer to persons born within the 50 states or the District of Columbia. People born in Puerto Rico or the territories, although U.S. citizens, are grouped with those born in other countries. Because of issues related to language and schooling and because CPS does not cover the outlying areas, individuals born in Puerto Rico or the U.S. territories are distinguished from those born in the 50 states or the District of Columbia.

[19]See U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1995* (1997), tables 16 and 20. The English-speaking ability is based on the reports of a household respondent rather than reports from each individual in the household. These data on the ability to speak in English are limited to young adults who were reported as speaking Spanish at home.

Table 3—Status dropout rates and number and distribution of dropouts of 16- through 24-year-olds, by background characteristics: October 1998

Characteristic	Status dropout rate (percent)	Number of status dropouts (thousands)	Population (thousands)	Percent of all dropouts	Percent of population
Total	11.8	3,942	33,445	100.0	100.0
Sex					
Male	13.3	2,241	16,854	56.8	50.4
Female	10.3	1,701	16,592	43.2	49.6
Race–ethnicity[1]					
White, non-Hispanic	7.7	1,697	21,920	43.0	66.0
Black, non-Hispanic	13.8	675	4,893	17.1	14.6
Hispanic	29.5	1,487	5,034	37.7	15.1
Asian/Pacific Islander	4.1	55	1,356	1.4	4.1
Age					
16	3.3	133	4,000	3.4	12.0
17	6.7	266	3,938	6.7	11.8
18	13.2	524	3,955	13.3	11.8
19	14.7	580	3,947	14.7	11.8
20 through 24	13.9	2,440	17,605	61.9	52.6
Recency of immigration					
Born outside the 50 states and the District of Columbia					
Hispanic	44.4	961	2,167	24.4	6.5
Non-Hispanic	7.2	130	1,789	3.3	5.3
First generation[2]					
Hispanic	20.5	315	1,538	8.0	4.6
Non-Hispanic	5.2	94	1,787	2.4	5.3
Second generation or more[3]					
Hispanic	15.8	210	1,328	5.3	4.0
Non-Hispanic	9.0	2,233	24,385	56.6	74.3
Region					
Northeast	9.4	577	6,109	14.6	18.3
Midwest	8.0	622	7,772	15.8	23.2
South	13.1	1,522	11,597	38.6	34.7
West	15.3	1,221	7,967	31.0	23.8

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives are included in the total but are not shown separately.

[2]Individuals defined as "first generation" were born in the 50 states or the District of Columbia, and one or both of their parents were born outside the 50 states or the District of Columbia.

[3]Individuals defined as "second generation or more" were born in the 50 states or the District of Columbia, as were both of their parents.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1998.

Age and Sex

As might be expected, young adults of high school age (16 or 17) registered among the lowest status dropout rates, presumably because many of these individuals were still enrolled in school and pursuing a high school diploma.

Data on status dropout rates indicate that males were more likely to be status dropouts than females in 1998. Although males and females are relatively equally represented in the population of young adults ages 16–24, males constituted a greater percentage of all status dropouts: in 1998, 56.8 percent of all status dropouts were male, compared with 43.2 percent of all females.

Region

In 1998, status dropout rates in the Midwest (8.0 percent) and Northeast (9.4 percent) were significantly lower than dropout rates in the South (13.1 percent) and West (15.3 percent). While there was no statistically significant difference between status dropout rates in the Midwest and Northeast, the percent of young adults who were high school dropouts in the South was less than the percent of young adults who were dropouts in the West.

Moreover, while young adults living in the Midwest made up roughly 23.2 percent of the young adult population of the United States, 15.8 percent of all dropouts resided in this region. Young adult dropouts living in the Northeast also represented a smaller proportion of dropouts (14.6 percent) in comparison with the proportion of all young adults living in this region (18.3 percent). Status dropout rates for 16- through 24-year-olds were also disproportionate to the population in other regions of the country. For example, while young adults in the West made up 23.8 percent of the total population, 31.0 percent of all dropouts lived in this region. The South also had disproportionately large numbers of dropouts in their young adult populations of 16- through 24-year-olds.

HIGH SCHOOL COMPLETION RATES

The relative importance of a high school education has changed dramatically over the last half century in the United States. When the grandparents of today's high school students entered adulthood, a high school education was an asset in the labor force, held by about half of the population ages 25 through 29 in 1950.[20] By the early 1970s, when the parents of today's high school students entered the work force, about 83 to 84 percent of the population ages 18 through 24 who were not enrolled in high school had completed a high school education (figure 3 and table A13). At that time, a high school education still served as an entryway to a number of promising career paths. Now, a quarter of a century later, technological advances in the workplace have increased the demand for a skilled labor force to the point where a high school education serves more as a minimum requirement for entry into the labor force. Completing a high school education is now even more essential in order to enter additional education and training or the labor force.

High School Completion Rates

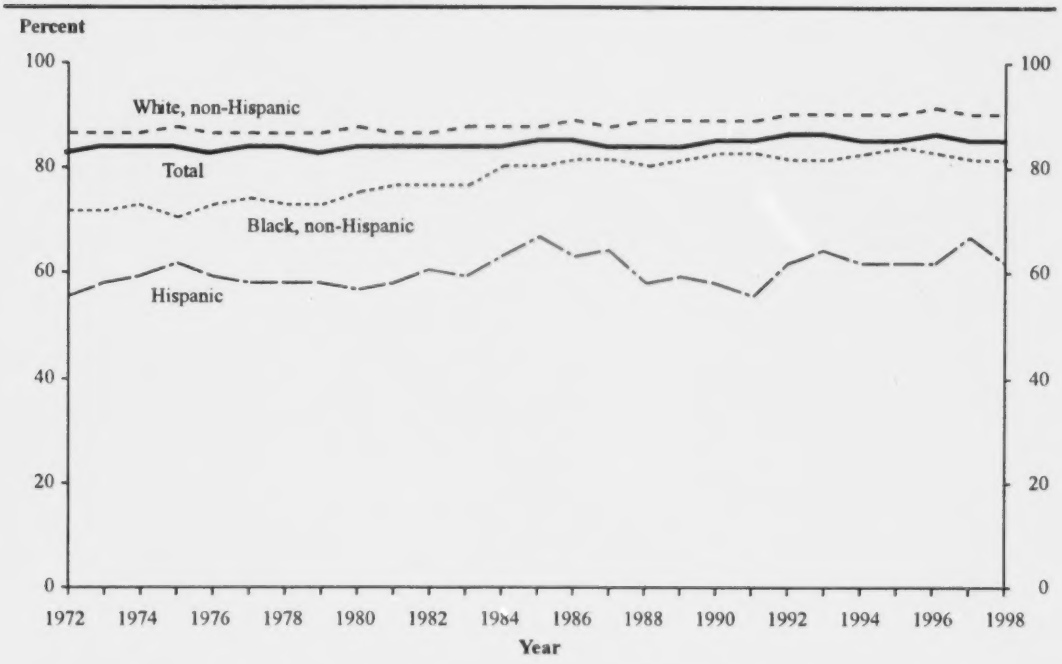
The high school completion rate represents the proportion of 18- through 24-year-olds who have completed a high school diploma or an equivalent credential, including a General Educational Development (GED) credential.[21] Despite the increased importance of a high school education, the high school completion rate for the country has increased only slightly over the last quarter of a century. Between 1972 and 1985, high school completion rates climbed by 2.6 percentage points (from 82.8 percent in 1972 to 85.4 percent in 1985); since 1985, the rate has fluctuated around 85 and 86 percent (figure 3 and table A13). This net increase of about 3 percentage points over 27 years represents slow progress toward achieving the national goal of a 90 percent high school completion rate.

---

[20]U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 1998*, NCES 1999-036 (Washington, D.C.: U.S. Government Printing Office, 1998).

[21]The high school completion rate is based on the population of young adults ages 18 through 24 who are not still enrolled in school; the status dropout rate is based on the population ages 16 through 24. Thus, the age range of the status dropout rate is 2 years wider, and those 18- through 24-year-olds who are still enrolled in a high school program are excluded from the calculation of the high school completion rate. Because of these differences, the status dropout rate and the high school completion rate are not the simple inverse of each other.

Figure 3—High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by race–ethnicity:[1] October 1972 through October 1998[2]



[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

[2]Numbers for years 1987 through 1998 reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items. Numbers for years 1992 through 1998 reflect new wording of the educational attainment item in the CPS beginning in 1992. Numbers for years 1994 through 1998 reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in population controls used in the 1990 Census-based estimates, with adjustment for undercounting in the 1990 Census. See appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Race–Ethnicity

High school completion rates analyzed within each racial–ethnic group have shown somewhat similar patterns over the past 27 years (figure 3 and table A13). Whites exhibited a positive trend in their high school completion over the last quarter of a century, although rates appear to have stabilized somewhat in the last decade. Specifically, their high school completion rates climbed from about 86 percent in the early 1970s to about 90 percent in the 1990s. Since 1990, white completion rates have fluctuated around 90 percent (figure 3 and table A13). Most recently, the high school completion rate of 90.2 percent for white young adults in 1998 was significantly higher than their completion rates in every year before 1986.

Black young adults also made significant gains in completing a high school education over the last quarter of a century, although, like whites, their completion rates appear to have stabilized in recent years. The 1998 black completion rate of 81.4 percent is significantly higher than their completion rates before 1981, indicating that a greater proportion of black young adults are now completing high school than they were in the 1970s. In addition, completion rates of black young adults continued to rise in the 1980s. Since 1990, black completion rates have fluctuated around 83 percent, and trend data over the period suggest that their completion rates have remained unchanged in the 1990s.

A relatively low percentage of Hispanic young adults complete high school programs. For example, in 1998, about 63 percent of all Hispanic 18- through 24-year-olds had completed secondary schooling. Overall, completion rates for Hispanics have fluctuated over the last quarter of a century, but have shown no consistent trend over the entire period. For example, completion rates for Hispanics increased between 1980 and 1985, declined between 1985 and 1990, and then remained at the same level between 1990 and 1998. The 1998 completion rate of 62.8 percent was not significantly different from the 1985 rate of 66.6 percent.

In 1998, as mentioned previously, Asians/Pacific Islanders were included as a distinctive group in the racial–ethnic categories being studied here. Overall, Asian youth are more likely than their white, black, and Hispanic peers to complete high school (table 4). For example, in 1998, 94.2 percent of Asian youth ages 18 through 24 had completed high school, compared with 90.2 percent of white youth, followed by 81.4 percent of black and 62.8 percent of Hispanic youth. Although a smaller proportion of white youth completed high school than did their Asian peers, they completed high school at higher rates than both black and Hispanic youth.

Table 4—High school completion rates and number and distribution of completers, 18- through 24-years-old not currently enrolled in high school or below, by background characteristics: October 1998

Characteristic	Completion rate (percent)			Number of completers (thousands)	Population (thousands)	Percent of all completers
	Total	Diploma	Alternative[1]			
Total	84.8	74.7	10.1	20,451	24,113	100.0
Sex						
Male	82.6	72.2	10.4	9,854	11,934	48.2
Female	87.0	77.1	9.8	10,597	12,180	51.8
Race–ethnicity[2]						
White, non-Hispanic	90.2	80.2	10.0	14,333	15,893	70.1
Black, non-Hispanic	81.4	71.7	9.6	2,680	3,294	13.1
Hispanic	62.8	52.1	10.7	2,381	3,788	11.6
Asian/Pacific Islander	94.2	82.9	11.3	929	986	4.5
Age						
18 through 19	82.3	72.5	9.8	5,479	6,658	26.8
20 through 21	85.0	75.0	10.0	5,970	7,025	29.2
22 through 24	86.3	75.9	10.4	9,002	10,430	44.0
Region						
Northeast	87.8	78.2	9.5	3,845	4,379	18.8
Midwest	88.3	80.2	9.1	4,926	5,518	24.1
South	83.4	74.0	9.4	6,921	8,300	33.8
West	80.4	67.9	12.6	4,759	5,916	23.3

[1]Completed high school by means of an equivalency test, such as a GED exam.
[2]Due to relatively small sample sizes, American Indians/Alaskan Natives are included in the total but are not shown separately.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1998.

Age and Sex

Young adults ages 18–19 who were no longer enrolled in high school were less likely than older adults to have completed high school. In 1998, approximately 82 percent of 18- through 19-year-olds not currently enrolled in high school had completed their secondary schooling, compared with 86.3 percent of young adults ages 20–24 (table 4).

As might be expected given their relatively lower status dropout rates, females ages 18–24 who were no longer enrolled in high school were more likely to have

completed high school than their male peers. In 1998, 87.0 percent of female young adults completed high school compared with about 82.6 percent of male young adults.

Region and State

Overall, young adults in the Northeast and Midwest had higher completion rates than their contemporaries living in the West and the South (table 4). Approximately 88 percent of young adults in both the Northeast and Midwest completed high school compared with 83.4 percent in the South. In addition, young adults living in the West had a lower completion rate (80.4 percent) than those not only living in the Northeast and Midwest, but those living in the South as well.

Often interest in geographic comparisons extends beyond the regional level to state-specific data. In order to compare high school completion on a state-by-state basis, completion rates are computed based on data spanning a 3-year period. The resulting state-specific completion rates represent the average annual rate over the 3-year periods of 1990–92, 1993–95, and 1996–98.[22] These data show considerable state-by-state variation (table 5).[23] Using the 1996–98 3-year average, the national rate was 85.6 percent, with the average completion rates ranging from about 75 percent in Oregon to approximately 94-95 percent in North Dakota, Maryland, and Vermont.

---

[22] The sample sizes of the numbers of completers at the state level in the CPS are, by definition, substantially smaller than the counts of completers supporting the national estimates (but appreciably larger than the counts of dropouts). To improve the stability of the state-level estimates for high school completion rates, the rates are displayed as 3-year averages (for example, the data for 1990–92 represent the average of the data from 1990, 1991, and 1992, and the data for 1996–98 are based on averages of data from 1996, 1997, and 1998). Even given this situation, sampling variability is increased substantially, especially in states with relatively smaller populations in the 18 through 24 age range. Thus, it is not surprising that the rates for some states fluctuate over the 3-year periods. Moreover, it should be noted that survey respondents may have attended school in a different state from the one in which they lived at the time of the CPS interview.

[23] A table of overlapping three-year average completion rates from 1989-1991 to 1996-98 is provided in appendix B (table B11).

Table 5—High school completion rates of 18 through 24-year-olds not currently enrolled in high school or below, by state: October 1990–92, 1993–95, and 1996–98

State	Completion rate (percent)		
	1990–92*	1993–95*	1996–98*
Total	85.5	85.8	85.6
Alabama	83.9	83.6	84.2
Alaska	86.9	90.5	88.3
Arizona	81.7	83.8	77.1
Arkansas	87.5	88.3	84.5
California	77.3	78.7	81.2
Colorado	88.1	88.4	85.5
Connecticut	89.9	94.7	91.6
Delaware	86.2	93.0	88.5
District of Columbia	84.0	87.7	84.9
Florida	84.1	80.6	83.6
Georgia	85.1	80.3	84.8
Hawaii	93.5	92.0	92.3
Idaho	84.7	86.1	85.8
Illinois	86.0	86.5	86.6
Indiana	87.8	88.5	89.3
Iowa	94.6	93.2	88.0
Kansas	93.2	90.9	91.6
Kentucky	81.1	82.4	85.2
Louisiana	83.9	80.1	81.6
Maine	91.9	92.9	91.6
Maryland	88.6	93.6	94.5
Massachusetts	89.8	92.5	90.6
Michigan	87.2	88.6	91.0
Minnesota	92.5	93.1	90.0
Mississippi	85.4	83.9	82.0
Missouri	88.1	90.4	90.4
Montana	91.6	89.6	91.1
Nebraska	92.5	94.1	91.2
Nevada	82.1	81.9	78.2
New Hampshire	87.9	86.9	89.2
New Jersey	90.8	91.6	91.8
New Mexico	84.1	82.3	78.6
New York	88.0	87.0	84.7
North Carolina	83.0	85.5	85.2
North Dakota	96.3	96.4	94.7
Ohio	90.0	88.3	89.4
Oklahoma	84.3	86.7	86.0
Oregon	89.6	82.6	75.4
Pennsylvania	90.2	89.4	87.6
Rhode Island	87.9	89.4	86.1

Table 5—High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by state: October 1990–92, 1993–95, and 1996–98—Continued

State	Completion rate (percent)		
	1990–92*	1993–95*	1996–98*
South Carolina	85.0	87.8	87.6
South Dakota	89.1	91.3	89.8
Tennessee	76.7	84.5	86.9
Texas	80.0	79.5	80.2
Utah	93.9	93.4	90.7
Vermont	87.0	88.1	93.6
Virginia	88.6	87.5	85.9
Washington	90.7	85.7	87.7
West Virginia	83.3	86.8	89.1
Wisconsin	92.4	93.5	90.8
Wyoming	92.0	90.8	87.6

*Numbers in this table reflect 3-year averages. Numbers for these periods reflect new wording of the educational attainment item in the CPS beginning in 1992 and changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing. They also reflect change in population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Method of High School Completion

The pressures placed on the education system to turn out increasingly larger numbers of qualified lifelong learners have generated increased interest in alternative methods of high school completion. At this point, most students pursuing an alternative to a regular diploma take the GED tests, with the goal of earning a high school equivalency credential.

From 1972 to 1998, approximately 20 million adults took the GED tests, and about 11.5 million, or 60 percent, received a high school equivalency credential based on these tests.[24] A minimum passing score is set nationally by the test administrator at the American Council on Education, and individual states set their own passing scores at or above the minimum requirement. In January of 1997, this minimum passing score was raised to a new standard that requires that all GED graduates must exceed the performance of at least 33 percent of traditional graduating high school seniors. In 1998, about 510,000 of the 718,000 adults (70.9 percent) worldwide who took the GED test earned a high school equivalency credential.[25]

[24]American Council of Education, *Who Took the Ged? GED 1998 Statistical Report* (Washington D.C. GED Testing Service, 1998). These numbers represent totals for adults worldwide who took the GED tests and earned high school equivalency credentials. For U.S. totals and more detailed GED trend data, see appendix C, figure C1 and table C3.
[25]IBID.

Anyone age 16 or older who is out of school and does not hold a high school diploma can register and take the GED test. Historically, the GED was established as a means of offering a high school credential to World War II veterans who might have interrupted their schooling to go to war. Since that time, the GED has been viewed as a second-chance program for people who failed to graduate from a regular high school program. Seemingly in contradiction with these programmatic goals, data on GED test-takers show that while the average age of GED test-takers is about 26, over the last quarter of a century, one-third of the test-takers have been ages 16 through 19.[26]

In recent years, research on the adult outcomes for GED credential holders, as compared with dropouts on one hand, and regular diploma recipients on the other, has fueled a debate over the value of the GED credential. There is conflicting evidence in the research literature concerning the effects of having a GED credential on labor force participation, employment, earnings, wage rates, postsecondary program participation, and persistence in postsecondary programs.[27]

These conflicting findings have led some researchers to question the efficacy of promoting GED programs for youths who are still young enough to participate in regular high school programs. This debate highlights the need to monitor the characteristics and the relative size of the groups of dropouts, high school graduates, and alternative completers.

Most of the 84.8 percent of 18- through 24-year-olds who had completed high school by October 1998 graduated with a regular diploma. In 1998, 74.7 percent of the 18- through 24-year-olds who were not still enrolled in high school held regular diplomas, which represented the high school graduation rate (as opposed to the high school completion rate) (table 6).

---

[26]U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 1998*, NCES 1999-036 (Washington, D.C.: U.S. Government Printing Office, 1996), table 104.

[27]See, for example, R.J. Murnane, J.B. Willett, and J.H. Tyler, *Who Benefits from Obtaining a GED? Evidence from High School and Beyond*, NBER Working Paper No. W7172 (1999); R.J. Murnane, J.B. Willet, and K.P. Boudett, "Do High School Dropouts Benefit from Obtaining a GED?" Education and Policy Analysis 17 (2): 133–47; Iowa Department of Education, What Has Happened to Iowa's GED graduates? A Two-, Five-, and Ten-Year Follow-Up Study, ED 344-047 (Des Moines: State of Iowa Department of Education, 1992); J. Baldwin, I.S. Hirsch, D. Rock, and K. Yamamoto, The Literacy Proficiencies of GED Examinees: Results from the GED-NALS Comparison Study (Washington, D.C. and Princeton, NJ: The American Council on Education and the Educational Testing Service, 1995). Also, for a detailed review of the literature, see U.S. Department of Education, National Library of Education, Educational and Labor Market Performance of GED Recipients, by D. Boesel, N. Alsalam, and T. Smith (Washington D.C.: 1996).

Table 6—High school completion rates and method of completion of 18- through 24-year-olds not currently enrolled in high school or below: October 1988 through October 1998

Year	Completion method (percent)		
	Total	Diploma	Alternative[1]
1988	84.5	80.3	4.2
1989	84.7	80.5	4.2
1990	85.6	80.6	4.9
1991	84.9	80.7	4.2
1992[2]	86.4	81.2	5.2
1993[2]	86.2	81.2	4.9
1994[2,3]	85.8	78.8	7.0
1995[2,3]	85.3	77.5	7.7
1996[2,3]	86.2	76.5	9.8
1997[2,3]	85.9	76.7	9.1
1998[2,3]	84.8	74.7	10.1

[1]Completed high school by means of an equivalency test, such as a GED exam.
[2]Numbers for these years reflect the new wording of the educational attainment item in the CPS beginning in 1992.
[3]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls to the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

In 1998, 2 million young adults 18 through 24 years old were reported as having earned high school credentials by passing an equivalency exam such as the GED test.[28] The young adults who completed high school through this alternative route accounted for 10.1 percent of the 18- through 24-year-olds who were not still enrolled in high school in 1998 (table 6).

CPS data indicating whether high school credentials were obtained through a regular diploma or through an alternative route were first collected in 1988.[29] Between 1988 and 1998, the diploma rate declined by 5.6 percentage points, falling from 80.3 percent in 1988 to 74.7 percent in 1998. In comparison, the alternative credential rate increased by 5.9 percentage points, climbing from 4.2 percent to 10.1 percent over the same period. As noted in appendix C, the rate increase from 1993 to 1994 coincided with

[28]The GED test is the principal equivalency exam in use at this time. In 1997, more than 780,000 people living in the United States age 16 or older took the GED test, and 59 percent, or more than 460,000, passed the exam in order to earn a high school credential. See GED Testing Service, *Who Took the GED? 1998 GED Statistical Report* (Washington D.C.: American Council on Education, 1998).
[29]In the CPS data there may be some ambiguity concerning students who complete high school with a certificate of attendance. While they should be counted as noncompleters, some respondents may report them as completers when asked about educational attainment.

the CPS implementation of computer-assisted interviewing procedures. However, the rate continued to increase between 1994 and 1998.

Among young adults in the four racial–ethnic groups under study, Asians and whites were about as likely to have earned a high school diploma (82.9 percent and 80.2 percent, respectively), followed by blacks (71.7 percent) and then Hispanics (52.1 percent) (table 4). Although Hispanic youths were the least likely of the four racial–ethnic groups to have earned a high school diploma, they were as likely to complete school with an alternative credential (e.g., a GED) as white, black, and Asian young adults (approximately 10 to 11 percent of each group).

CONCLUSIONS

In October 1998, nearly 5 out of every 100 young adults enrolled in high school in October 1997 had left high school without successfully completing a high school program. In total, these dropouts accounted for approximately one-half million of the 10 million 15- through 24-year-olds enrolled in high school in the previous October. These numbers have not changed appreciably in recent years.

The cumulative effect of hundreds of thousands of young adults leaving school each year short of finishing a high school program translates into several million young adults who are out of school, yet lacking a high school credential. In 1998, there were 3.9 million 16- through 24-year-olds who, although not enrolled in school, had not yet completed a high school program. Overall, 11.8 percent of the 33 million 16- through 24-year-olds in the United States were dropouts. Although there have been a number of year-to-year fluctuations in this rate, over the past 27 years, there has been a gradual pattern of decline that amounts to an average annual percentage change of 0.1 percentage points per year.

The goal of reducing the dropout rate is to increase the percentage of young adults who complete a high school education. Despite the increased importance of a high school education, the high school completion rate has shown limited gains over the last quarter of a century and has been stable throughout most of the 1990s. In 1998, approximately three-quarters of the 18- through 24-year-olds not still in high school were reported as being high school graduates (74.7 percent); another 10.1 percent of these youths were reported as having completed by an alternative route such as the GED.

Over the last 9 years, the percentage of young adults completing high school has been relatively stable for whites and blacks. During the same period, the percentage completing high school through an alternative test has increased, with 1998 alternative completion rates of about 10 percent for white, black, Hispanic, and Asian young adults.

The net effect of these recent changes has been stable dropout and high school completion rates for young adults in the 1990s. These findings suggest that the emphasis in recent years on decreasing dropout rates as well as revising standards and high school graduation requirements may have translated into increased use of alternative methods of high school completion, rather than an overall decrease in dropout rates or increase in the proportion of young adults holding a high school diploma.

APPENDIX A

Standard Error and Time Series Tables

Table A1—Standard errors for table A: Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school, by race–ethnicity: October 1998

Dropout and completion measures	Total[1]	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian/Pacific Islander
Percentage of youth ages 15–24 who dropped out of grades 10–12, October 1997 through October 1998	0.33	0.36	0.91	1.48	—
Percentage of youth ages 16–24 who were dropouts in 1998	0.27	0.28	0.81	1.12	0.94
Percentage of youth ages 18–24 who were high school completers in 1998[2]	0.36	0.36	1.11	1.37	1.30

—Sample size too small for reliable estimate.

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives are included in the total but are not shown separately.

[2]Excludes those still enrolled in high school.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1998.

Table A2—Standard errors for table 1: Event dropout rates and number and distribution of 15- through 24-year-olds who dropped out of grades 10–12, by background characteristics: October 1998

Characteristic	Event dropout rate (percent)	Number of event dropouts (thousands)	Population enrolled (thousands)	Percent of all dropouts	Percent of population
Total	0.33	33	132	—	—
Sex					
Male	0.45	23	94	3.52	0.77
Female	0.47	23	93	3.52	0.77
Race–ethnicity[1]					
White, non-Hispanic	0.36	25	108	3.49	0.72
Black, non-Hispanic	0.91	14	52	2.67	0.56
Hispanic	1.48	16	48	3.00	0.50
Family income[2]					
Low	1.34	20	52	3.42	0.54
Middle	0.39	22	100	3.50	0.76
High	0.46	14	67	2.62	0.69
Age[3]					
15 through 16	0.44	12	66	2.42	0.69
17	0.43	15	32	2.84	0.73
18	0.69	19	44	3.34	0.69
19	1.67	13	39	2.69	0.41
20 through 24	4.34	11	24	2.41	0.24
Region					
Northeast	0.68	13	57	2.49	0.59
Midwest	0.57	14	65	2.75	0.66
South	0.58	20	77	3.39	0.73
West	0.77	18	64	3.21	0.64

— Not applicable.

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

[2]Low income is defined as the bottom 20 percent of all family incomes for 1998; middle income is between the 20th and 80th percentiles of all family incomes; and high income is the top 20 percent of all family incomes. See appendix C of this report for a full definition of family income.

[3]Age when a person dropped out may be 1 year younger because the dropout event could occur at any time over a 12-month period.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1998.

Table A3—Standard errors for table 3: Status dropout rates and number and distribution of dropouts of 16- through 24-year-olds, by background characteristics: October 1998

Characteristic	Status dropout rate (percent)	Number of status dropouts (thousands)	Percent of all dropouts	Percent of population
Total	0.27	91	—	—
Sex				
Male	0.40	68	1.21	0.42
Female	0.36	60	1.21	0.42
Race–ethnicity[1]				
White, non-Hispanic	0.28	61	1.21	0.42
Black, non-Hispanic	0.81	39	0.92	0.34
Hispanic	1.12	57	1.19	0.46
Asian/Pacific Islander	0.94	13	0.29	0.10
Age				
16	0.43	17	0.44	0.15
17	0.61	24	0.61	0.21
18	0.83	33	0.83	0.29
19	0.87	34	0.87	0.30
20 through 24	0.40	71	1.19	0.41
Recency of immigration				
Born outside the 50 states and the District of Columbia				
Hispanic	1.86	40	1.19	0.41
Non-Hispanic	0.94	17	0.44	0.15
First generation[2]				
Hispanic	1.80	28	0.75	0.26
Non-Hispanic	0.81	14	0.37	0.13
Second generation or more[3]				
Hispanic	1.75	23	0.62	0.21
Non-Hispanic	0.28	69	1.21	0.42
Region				
Northeast	0.57	35	0.87	0.30
Midwest	0.47	37	0.89	0.31
South	0.48	56	1.19	0.41
West	0.62	49	1.13	0.39

—Not applicable.

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives are included in the total but are not shown separately.

[2]Individuals defined as "first generation" were born in the 50 states or the District of Columbia, and one or both of their parents were born outside the 50 states or the District of Columbia.

[3]Individuals defined as "second generation or more" were born in the 50 states or the District of Columbia, as were both of their parents.

NOTE: Standard errors for population estimates in table 3 cannot be calculated.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1998.

Table A4—Standard errors for table 4: High school completion rates and number and distribution of completers of 18- through 24-year-olds not currently enrolled in high school or below, by background characteristics: October 1998

Characteristic	Completion rate (percent)			Number of completers (thousands)	Percent of all completers
	Total	Diploma	Alternative[1]		
Total	0.36	0.43	0.30	86	—
Sex					
Male	0.53	0.63	0.43	64	0.54
Female	0.47	0.59	0.42	57	0.54
Race–ethnicity[2]					
White, non-Hispanic	0.36	0.49	0.37	58	0.49
Black, non-Hispanic	1.11	1.21	0.84	34	0.39
Hispanic	1.37	1.25	0.88	46	0.39
Asian/Pacific Islander	1.30	1.85	1.76	11	0.22
Age					
18 through 19	0.72	0.84	0.56	48	0.48
20 through 21	0.66	0.80	0.55	46	0.49
22 through 24	0.52	0.64	0.46	54	0.53
Region					
Northeast	0.76	0.96	0.68	33	0.42
Midwest	0.64	0.83	0.60	35	0.46
South	0.63	0.74	0.49	52	0.51
West	0.79	0.93	0.66	47	0.45

— Not applicable.

[1]Completed high school by means of an equivalency test, such as a GED exam.

[2]Due to relatively small sample sizes, American Indians/Alaskan Natives are included in the total but are not shown separately.

NOTE: Standard errors for population estimates in table 4 cannot be calculated.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1998.

Table A5—Standard errors for table 5: High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by state: October 1990–92, 1993–95, and 1996–98

State	Completion rate (percent)		
	1990–92*	1993–95*	1996–98*
Total	0.21	0.21	0.20
Alabama	1.65	1.70	1.50
Alaska	4.77	3.90	4.02
Arizona	2.06	1.83	1.70
Arkansas	2.09	2.00	2.04
California	0.70	0.71	0.63
Colorado	1.74	1.55	1.63
Connecticut	1.59	1.29	1.56
Delaware	4.10	2.90	3.43
District of Columbia	4.78	4.13	4.22
Florida	0.98	1.03	0.95
Georgia	1.35	1.39	1.24
Hawaii	2.31	2.53	2.15
Idaho	3.70	3.03	2.77
Illinois	0.96	0.94	0.91
Indiana	1.36	1.24	1.21
Iowa	1.24	1.34	1.87
Kansas	1.48	1.73	1.52
Kentucky	1.94	1.95	1.78
Louisiana	1.67	1.89	1.58
Maine	2.42	2.30	2.50
Maryland	1.34	1.12	1.06
Massachusetts	1.16	1.06	1.18
Michigan	1.03	0.98	0.85
Minnesota	1.17	1.14	1.35
Mississippi	2.02	2.14	2.14
Missouri	1.31	1.35	1.20
Montana	3.00	3.50	2.74
Nebraska	2.00	1.79	1.97
Nevada	3.46	3.35	3.12
New Hampshire	3.05	3.18	2.99
New Jersey	1.01	0.99	0.94
New Mexico	2.97	3.00	2.85
New York	0.74	0.77	0.80
North Carolina	1.37	1.26	1.17
North Dakota	2.25	2.18	2.52
Ohio	0.86	0.93	0.87
Oklahoma	2.01	1.93	1.84
Oregon	1.78	2.13	2.20
Pennsylvania	0.85	0.89	0.91
Rhode Island	3.20	3.30	3.36

Table A5—Standard errors for table 5: High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by state: October 1990–92, 1993–95, and 1996–98—Continued

State	Completion rate (percent)		
	1990–92*	1993–95*	1996–98*
South Carolina	1.82	1.65	1.60
South Dakota	3.51	3.30	3.07
Tennessee	1.79	1.52	1.41
Texas	0.89	0.87	0.82
Utah	1.60	1.56	1.60
Vermont	4.66	4.34	3.06
Virginia	1.28	1.24	1.36
Washington	1.33	1.44	1.29
West Virginia	2.65	2.38	2.17
Wisconsin	1.11	1.04	1.20
Wyoming	4.08	3.98	4.38

*Numbers in this table reflect 3-year averages. Numbers for these periods reflect new wording of the educational attainment item in the CPS beginning in 1992 and changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing. They also reflect the change in population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table A6—Standard errors for table 6: High school completion rates and method of completion of 18- through 24-year-olds not currently enrolled in high school or below: October 1988 through October 1998

Year	Completion method (percent)		
	Total	Diploma	Alternative[1]
1988	0.37	0.40	0.20
1989	0.37	0.41	0.21
1990	0.36	0.41	0.22
1991	0.37	0.41	0.21
1992[2]	0.36	0.41	0.23
1993[2]	0.36	0.41	0.23
1994[2,3]	0.36	0.42	0.26
1995[2,3]	0.37	0.43	0.28
1996[2,3]	0.35	0.43	0.30
1997[2,3]	0.35	0.42	0.29
1998[2,3]	0.36	0.43	0.30

[1]Completed high school by means of an equivalency test, such as a GED exam.
[2]Numbers for these years reflect the new wording of the educational attainment item in the CPS beginning in 1992.
[3]Numbers for these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls to the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table A7—Supporting data for figure A: Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school: October 1972 through October 1998

Year	Event dropout rate Percentage of 15-through 24-year olds in grades 10 through 12 who dropped out in the past year	Status dropout rate Percentage of 16-through 24-year olds who were dropouts	Completion rate Percentage of 18-through 24-year olds who completed high school[1]
1972	6.1	14.6	82.8
1973	6.3	14.1	83.7
1974	6.7	14.3	83.6
1975	5.8	13.9	83.8
1976	5.9	14.1	83.5
1977	6.5	14.1	83.6
1978	6.7	14.2	83.6
1979	6.7	14.6	83.1
1980	6.1	14.1	83.9
1981	5.9	13.9	83.8
1982	5.5	13.9	83.8
1983	5.2	13.7	83.9
1984	5.1	13.1	84.7
1985	5.2	12.6	85.4
1986	4.7	12.2	85.5
1987[2]	4.1	12.7	84.7
1988[2]	4.8	12.9	84.5
1989[2]	4.5	12.6	84.7
1990[2]	4.0	12.1	85.6
1991[2]	4.1	12.5	84.9
1992[2,3]	4.4	11.0	86.4
1993[2,3]	4.5	11.0	86.2
1994[2,3,4]	5.3	11.5	85.8
1995[2,3,4]	5.7	12.0	85.3
1996[2,3,4]	5.0	11.1	86.2
1997[2,3,4]	4.6	11.0	85.9
1998[2,3,4]	4.8	11.8	84.8

[1]Excluding those still enrolled in high school.

[2]Numbers for these years reflect new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in population controls used in the 1990 Census-based estimates, with adjustment for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table A8—Standard errors for figure A: Percentage of 15- through 24-year-olds who dropped out of grades 10–12, percentage of 16- through 24-year-olds who were dropouts, and percentage of 18- through 24-year-olds who completed high school: October 1972 through October 1998

Year	Event dropout rate Percentage of 15-through 24-year olds in grades 10 through 12 who dropped out in the past year	Status dropout rate Percentage of 16-through 24-year olds who were dropouts	Completion rate Percentage of 18-through 24-year olds who completed high school[1]
1972	0.33	0.28	0.32
1973	0.33	0.27	0.31
1974	0.34	0.27	0.31
1975	0.32	0.27	0.30
1976	0.32	0.26	0.30
1977	0.34	0.27	0.30
1978	0.34	0.27	0.30
1979	0.34	0.27	0.30
1980	0.33	0.26	0.30
1981	0.33	0.26	0.29
1982	0.34	0.27	0.31
1983	0.33	0.27	0.31
1984	0.33	0.27	0.31
1985	0.34	0.27	0.31
1986	0.32	0.27	0.31
1987[2]	0.30	0.28	0.36
1988[2]	0.36	0.30	0.36
1989[2]	0.36	0.31	0.34
1990[2]	0.34	0.29	0.34
1991[2]	0.34	0.30	0.34
1992[2,3]	0.35	0.28	0.33
1993[2,3]	0.36	0.28	0.34
1994[2,3,4]	0.34	0.26	0.34
1995[2,3,4]	0.35	0.27	0.35
1996[2,3,4]	0.34	0.27	0.35
1997[2,3,4]	0.32	0.27	0.35
1998[2,3,4]	0.33	0.27	0.36

[1]Excluding those still enrolled in high school.

[2]Numbers for these years reflect new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in population controls used in the 1990 Census-based estimates, with adjustment for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

BEST COPY AVAILABLE

Table A9—Supporting data for figure 1: Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by family income: October 1972 through October 1998

Year	Event dropout rate (percent)	Family income (percent)[1]		
		Low income	Middle income	High income
1972	6.1	14.1	6.7	2.5
1973	6.3	17.3	7.0	1.8
1974	6.7	—	—	—
1975	5.8	15.7	6.0	2.6
1976	5.9	15.4	6.8	2.1
1977	6.5	15.5	7.6	2.2
1978	6.7	17.4	7.3	3.0
1979	6.7	17.1	6.9	3.6
1980	6.1	15.8	6.4	2.5
1981	5.9	14.4	6.2	2.8
1982	5.5	15.2	5.6	1.8
1983	5.2	10.4	6.0	2.2
1984	5.1	13.9	5.1	1.8
1985	5.2	14.2	5.2	2.1
1986	4.7	10.9	5.1	1.6
1987[2]	4.1	10.3	4.7	1.0
1988[2]	4.8	13.7	4.7	1.3
1989[2]	4.5	10.0	5.0	1.1
1990[2]	4.0	9.5	4.3	1.1
1991[2]	4.1	10.6	4.0	1.0
1992[2,3]	4.4	10.9	4.4	1.3
1993[2,3]	4.5	12.3	4.3	1.3
1994[2,3,4]	5.3	13.0	5.2	2.1
1995[2,3,4]	5.7	13.3	5.7	2.0
1996[2,3,4]	5.0	11.1	5.1	2.1
1997[2,3,4]	4.6	12.3	4.1	1.8
1998[2,3,4]	4.8	12.7	3.8	2.7

— Data not available for this year.

[1]Low income is defined as the bottom 20 percent of all family incomes for the year; middle income is between the 20th and 80th percentiles of all family incomes; and high income is the top 20 percent of all family incomes. See appendix C of this report for a full definition of family income.

[2]Numbers for these years reflect the new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table A10—Standard errors for figure 1: Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by family income: October 1972 through October 1998

Year	Event dropout rate (percent)	Family income (percent)[1]		
		Low income	Middle income	High income
1972	0.33	1.55	0.45	0.39
1973	0.33	1.65	0.46	0.32
1974	0.34	—	—	—
1975	0.32	1.57	0.43	0.38
1976	0.32	1.61	0.46	0.34
1977	0.34	1.57	0.48	0.35
1978	0.34	1.69	0.48	0.40
1979	0.34	1.62	0.47	0.44
1980	0.33	1.51	0.46	0.38
1981	0.33	1.50	0.45	0.41
1982	0.34	1.52	0.46	0.36
1983	0.33	1.35	0.48	0.39
1984	0.33	1.49	0.45	0.37
1985	0.34	1.53	0.47	0.39
1986	0.32	1.33	0.45	0.34
1987[2]	0.30	1.29	0.45	0.27
1988[2]	0.36	1.59	0.48	0.35
1989[2]	0.36	1.43	0.50	0.33
1990[2]	0.34	1.39	0.45	0.33
1991[2]	0.34	1.43	0.44	0.31
1992[2,3]	0.35	1.42	0.46	0.36
1993[2,3]	0.36	1.57	0.46	0.35
1994[2,3,4]	0.34	1.44	0.44	0.41
1995[2,3,4]	0.35	1.36	0.47	0.39
1996[2,3,4]	0.34	1.34	0.46	0.41
1997[2,3,4]	0.32	1.36	0.41	0.37
1998[2,3,4]	0.33	1.34	0.39	0.46

— Data not available for this year.

[1]Low income is defined as the bottom 20 percent of all family incomes for the year; middle income is between the 20th and 80th percentiles of all family incomes; and high income is the top 20 percent of all family incomes. See appendix C of this report for a full definition of family income.

[2]Numbers for these years reflect new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table A11—Supporting data for figure 2: Status dropout rates of 16- through 24-year-olds, by race–ethnicity: October 1972 through October 1998

Year	Total (percent)	Race–ethnicity (percent)[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
1972	14.6	12.3	21.3	34.3
1973	14.1	11.6	22.2	33.5
1974	14.3	11.9	21.2	33.0
1975	13.9	11.4	22.9	29.2
1976	14.1	12.0	20.5	31.4
1977	14.1	11.9	19.8	33.0
1978	14.2	11.9	20.2	33.3
1979	14.6	12.0	21.1	33.8
1980	14.1	11.4	19.1	35.2
1981	13.9	11.4	18.4	33.2
1982	13.9	11.4	18.4	31.7
1983	13.7	11.2	18.0	31.6
1984	13.1	11.0	15.5	29.8
1985	12.6	10.4	15.2	27.6
1986	12.2	9.7	14.2	30.1
1987[2]	12.7	10.4	14.1	28.6
1988[2]	12.9	9.6	14.5	35.8
1989[2]	12.6	9.4	13.9	33.0
1990[2]	12.1	9.0	13.2	32.4
1991[2]	12.5	8.9	13.6	35.3
1992[2,3]	11.0	7.7	13.7	29.4
1993[2,3]	11.0	7.9	13.6	27.5
1994[2,3,4]	11.5	7.7	12.6	30.0
1995[2,3,4]	12.0	8.6	12.1	30.0
1996[2,3,4]	11.1	7.3	13.0	29.4
1997[2,3,4]	11.0	7.6	13.4	25.3
1998[2,3,4]	11.8	7.7	13.8	29.5

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

[2]Numbers for these years reflect new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table A12—Standard errors for figure 2: Status dropout rates of 16- through 24-year-olds, by race–ethnicity: October 1972 through October 1998

Year	Total (percent)	Race–ethnicity (percent)[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
1972	0.28	0.29	1.07	2.22
1973	0.27	0.28	1.06	2.24
1974	0.27	0.28	1.05	2.08
1975	0.27	0.27	1.06	2.02
1976	0.26	0.28	1.01	2.01
1977	0.27	0.28	1.00	2.02
1978	0.27	0.28	1.00	2.00
1979	0.27	0.28	1.01	1.98
1980	0.26	0.27	0.97	1.89
1981	0.26	0.27	0.93	1.80
1982	0.27	0.29	0.98	1.93
1983	0.27	0.29	0.97	1.93
1984	0.27	0.29	0.92	1.91
1985	0.27	0.29	0.92	1.93
1986	0.27	0.28	0.90	1.88
1987[2]	0.28	0.30	0.91	1.84
1988[2]	0.30	0.32	1.00	2.30
1989[2]	0.31	0.32	0.98	2.19
1990[2]	0.29	0.30	0.94	1.91
1991[2]	0.30	0.31	0.95	1.93
1992[2,3]	0.28	0.29	0.95	1.86
1993[2,3]	0.28	0.29	0.94	1.79
1994[2,3,4]	0.26	0.27	0.75	1.16
1995[2,3,4]	0.27	0.28	0.74	1.15
1996[2,3,4]	0.27	0.26	0.75	1.13
1997[2,3,4]	0.27	0.28	0.80	1.11
1998[2,3,4]	0.27	0.28	0.81	1.12

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

[2]Numbers for these years reflect new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table A13—Supporting data for figure 3: High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by race–ethnicity: October 1972 through October 1998

Year	Total (percent)	Race–ethnicity (percent)[1]		
		White, non-Hispanic	Black, non-Hispanic	Hispanic
1972	82.8	86.0	72.1	56.2
1973	83.7	87.0	71.6	58.7
1974	83.6	86.7	73.0	60.1
1975	83.8	87.2	70.2	62.2
1976	83.5	86.4	73.5	60.3
1977	83.6	86.7	73.9	58.6
1978	83.6	86.9	73.4	58.8
1979	83.1	86.6	72.6	58.5
1980	83.9	87.5	75.2	57.1
1981	83.8	87.1	76.7	59.1
1982	83.8	87.0	76.4	60.9
1983	83.9	87.4	76.8	59.4
1984	84.7	87.5	80.3	63.7
1985	85.4	88.2	81.0	66.6
1986	85.5	88.8	81.8	63.5
1987[2]	84.7	87.7	81.9	65.1
1988[2]	84.5	88.7	80.9	58.2
1989[2]	84.7	89.0	81.9	59.4
1990[2]	85.6	89.6	83.2	59.1
1991[2]	84.9	89.4	82.5	56.5
1992[2,3]	86.4	90.7	82.0	62.1
1993[2,3]	86.2	90.1	81.9	64.4
1994[2,3,4]	85.8	90.7	83.3	61.8
1995[2,3,4]	85.3	89.8	84.5	62.8
1996[2,3,4]	86.2	91.5	83.0	61.9
1997[2,3,4]	85.9	90.5	82.0	66.7
1998[2,3,4]	84.8	90.2	81.4	62.8

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

[2]Numbers for these years reflect new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table A14—Standard errors for figure 3: High school completion rates of 18- through 24-year-olds not currently enrolled in high school or below, by race–ethnicity: October 1972 through October 1998

Year	Total (percent)	Race–ethnicity (percent)[1] White, non-Hispanic	Black, non-Hispanic	Hispanic
1972	0.32	0.33	1.20	1.83
1973	0.31	0.31	1.17	1.83
1974	0.31	0.31	1.17	1.70
1975	0.30	0.30	1.18	1.72
1976	0.30	0.31	1.12	1.68
1977	0.30	0.31	1.12	1.66
1978	0.30	0.31	1.11	1.61
1979	0.30	0.31	1.11	1.58
1980	0.30	0.30	1.07	1.51
1981	0.29	0.30	1.02	1.46
1982	0.31	0.32	1.06	1.57
1983	0.31	0.32	1.06	1.59
1984	0.31	0.32	0.99	1.54
1985	0.31	0.32	1.00	1.58
1986	0.31	0.32	0.99	1.51
1987[2]	0.32	0.34	0.99	1.47
1988[2]	0.36	0.36	1.13	1.78
1989[2]	0.36	0.37	1.11	1.73
1990[2]	0.34	0.34	1.03	1.54
1991[2]	0.34	0.35	1.06	1.53
1992[2,3]	0.33	0.33	1.07	1.53
1993[2,3]	0.34	0.35	1.07	1.49
1994[2,3,4]	0.34	0.34	1.02	1.43
1995[2,3,4]	0.35	0.36	1.01	1.40
1996[2,3,4]	0.35	0.34	1.08	1.49
1997[2,3,4]	0.35	0.36	1.10	1.42
1998[2,3,4]	0.36	0.36	1.11	1.37

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

[2]Numbers for these years reflect new editing procedures instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

APPENDIX B

Supplemental Tables

Table B1—Event dropout rates and number of dropouts and population of 15- through 24-year-olds who were enrolled: October 1990 through October 1998

Year	Event dropout rate (percent)	Number of dropouts (thousands)	Population enrolled (thousands)
1990	4.0	347	8,675
1991	4.1	348	8,700
1992[1]	4.4	383	8,705
1993[1]	4.5	381	8,469
1994[1,2]	5.3	497	9,377
1995[1,2]	5.7	544	9,509
1996[1,2]	5.0	485	9,612
1997[1,2]	4.6	454	9,984
1998[1,2]	4.8	479	10,079

[1]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.
[2]Numbers for these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table B2—Standard errors for table B1: Event dropout rates and number of dropouts and population of 15- through 24-year-olds who were enrolled: October 1990 through October 1998

Year	Event dropout rate (percent)	Number of dropouts (thousands)	Population enrolled (thousands)
1990	0.34	29	128
1991	0.34	29	128
1992[1]	0.35	30	128
1993[1]	0.36	30	127
1994[1,2]	0.34	32	123
1995[1,2]	0.35	33	124
1996[1,2]	0.34	33	129
1997[1,2]	0.32	32	131
1998[1,2]	0.33	33	132

[1]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.

[2]Numbers for these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used to the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table B3—Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by sex and race–ethnicity: October 1972 through October 1998

Year	Total (percent)	Sex (percent)		Race–ethnicity (percent)[1]		
		Male	Female	White non-Hispanic	Black non-Hispanic	Hispanic
1972	6.1	5.9	6.3	5.3	9.5	11.2
1973	6.3	6.8	5.7	5.5	9.9	10.0
1974	6.7	7.4	6.0	5.8	11.6	9.9
1975	5.8	5.4	6.1	5.0	8.7	10.9
1976	5.9	6.6	5.2	5.6	7.4	7.3
1977	6.5	6.9	6.1	6.1	8.6	7.8
1978	6.7	7.5	5.9	5.8	10.2	12.3
1979	6.7	6.8	6.7	6.0	9.9	9.8
1980	6.1	6.7	5.5	5.2	8.2	11.7
1981	5.9	6.0	5.8	4.8	9.7	10.7
1982	5.5	5.8	5.1	4.7	7.8	9.2
1983	5.2	5.8	4.7	4.4	7.0	10.1
1984	5.1	5.4	4.8	4.4	5.7	11.1
1985	5.2	5.4	5.0	4.3	7.8	9.8
1986	4.7	4.7	4.7	3.7	5.4	11.9
1987[2]	4.1	4.3	3.8	3.5	6.4	5.4
1988[2]	4.8	5.1	4.4	4.2	5.9	10.4
1989[2]	4.5	4.5	4.5	3.5	7.8	7.8
1990[2]	4.0	4.0	3.9	3.3	5.0	7.9
1991[2]	4.1	3.8	4.2	3.2	6.0	7.3
1992[2,3]	4.4	3.9	4.9	3.7	5.0	8.2
1993[2,3]	4.5	4.6	4.3	3.9	5.8	6.7
1994[2,3,4]	5.3	5.2	5.4	4.2	6.6	10.0
1995[2,3,4]	5.7	6.2	5.3	4.5	6.4	12.4
1996[2,3,4]	5.0	5.0[5]	5.1[5]	4.1	6.7	9.0
1997[2,3,4]	4.6	5.0	4.1	3.6	5.0	9.5
1998[2,3,4]	4.8	4.6	4.9	3.9	5.2	9.4

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

[2]Numbers for these years reflect new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

[5]Revised from data in *Dropout Rates in the United States: 1996.*

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table B4—Standard errors for table B3: Event dropout rates of 15- through 24-year-olds who dropped out of grades 10–12, by sex and race–ethnicity: October 1972 through October 1998

		Sex (percent)		Race–ethnicity[1] (percent)		
Year	Total	Male	Female	White non-Hispanic	Black non-Hispanic	Hispanic
1972	0.33	0.46	0.48	0.34	1.32	2.81
1973	0.33	0.49	0.45	0.35	1.35	2.65
1974	0.34	0.51	0.46	0.35	1.41	2.52
1975	0.32	0.44	0.46	0.33	1.25	2.50
1976	0.32	0.48	0.43	0.35	1.15	2.05
1977	0.34	0.49	0.46	0.37	1.20	2.13
1978	0.34	0.51	0.46	0.36	1.31	2.75
1979	0.34	0.49	0.48	0.37	1.32	2.43
1980	0.33	0.49	0.45	0.35	1.21	2.56
1981	0.33	0.47	0.46	0.34	1.29	2.28
1982	0.34	0.49	0.46	0.36	1.21	2.31
1983	0.33	0.50	0.45	0.35	1.17	2.44
1984	0.33	0.49	0.46	0.36	1.06	2.51
1985	0.34	0.50	0.48	0.36	1.26	2.55
1986	0.32	0.46	0.45	0.34	1.05	2.69
1987[2]	0.30	0.44	0.41	0.33	1.14	1.89
1988[2]	0.36	0.52	0.50	0.39	1.20	3.09
1989[2]	0.36	0.51	0.51	0.37	1.39	2.65
1990[2]	0.34	0.48	0.47	0.36	1.15	2.29
1991[2]	0.34	0.46	0.49	0.36	1.20	2.17
1992[2,3]	0.35	0.46	0.53	0.38	1.09	2.23
1993[2,3]	0.36	0.51	0.50	0.40	1.20	2.03
1994[2,3,4]	0.34	0.48	0.49	0.37	1.03	1.52
1995[2,3,4]	0.35	0.51	0.48	0.38	1.00	1.61
1996[2,3,4]	0.34	0.49	0.51	0.38	1.05	1.50
1997[2,3,4]	0.32	0.47	0.43	0.35	0.92	1.45
1998[2,3,4]	0.33	0.45	0.47	0.36	0.91	1.48

[1]Due to relatively small sample sizes, American Indians/Alaskan Natives and Asians/Pacific Islanders are included in the total but are not shown separately.

[2]Numbers for these years reflect new editing procedures beginning in 1987 instituted by the Bureau of the Census for cases with missing data on school enrollment items.

[3]Numbers for these years reflect new wording of the educational attainment in the CPS beginning in 1992.

[4]Numbers in these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table B5—Rate and number of status dropouts and population of 16- through 24-year-olds: October 1990 through October 1998

Year	Status dropout rate (percent)	Number of status dropouts (thousands)	Population (thousands)
1990	12.1	3,797	31,443
1991	12.5	3,881	31,171
1992[1]	11.0	3,410	30,944
1993[1]	11.0	3,396	30,845
1994[1,2]	11.5	3,727	32,560
1995[1,2]	12.0	3,876	32,379
1996[1,2]	11.1	3,611	32,452
1997[1,2]	11.0	3,624	32,960
1998[1,2]	11.8	3,942	33,445

[1]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.
[2]Numbers for these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table B6—Standard errors for table B5: Rate and number of status dropouts and population of 16- through 24-year-olds: October 1990 through October 1998

Year	Status dropout rate (percent)	Number of status dropouts (thousands)
1990	0.29	92
1991	0.30	93
1992[1]	0.28	88
1993[1]	0.28	88
1994[1,2]	0.26	85
1995[1,2]	0.27	86
1996[1,2]	0.27	87
1997[1,2]	0.27	87
1998[1,2]	0.27	91

[1]Numbers for these years reflect new wording of the educational attainment item in the CPS beginning in 1992.
[2]Numbers for these years reflect changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing and the change in the population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

NOTE: Standard errors for population estimates in table B5 cannot be calculated.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table B7—National Education Longitudinal Study of 1988 (NELS:88) 8th- through 12th-grade cohort dropout rates, by sex and race–ethnicity: 1992 and 1994

Characteristic	Cohort dropout rate (percent)			
	Spring 1990–92[1]	Spring 1988–92[2]	August 1988–92[3]	August 1988–94[4]
Total	7.1	10.8	10.1	7.2
Sex				
Male	6.9	10.3	9.8	7.5
Female	7.4	11.3	10.4	6.9
Race–ethnicity[5]				
Asian/Pacific Islander	3.9	4.9	4.3	5.1
Hispanic	12.2	17.8	17.2	14.1
Black, non-Hispanic	9.1	13.4	12.7	8.5
White, non-Hispanic	5.9	9.1	8.3	5.8
American Indian/Alaskan Native	22.3	30.4	30.4	17.1

[1]The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in the spring of 1990; excluded are students who dropped out between 1988 and 1990 and students who migrated out of the country or died. The numerator for this rate are members of the same cohort who were not attending school for 4 consecutive weeks or more and who were not absent due to accident or illness in spring 1992. For a more detailed discussion of NELS dropout rates, please see appendix C.

[2]The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in the spring of 1992; excluded are students who dropped out between 1988 and 1992 and students who migrated out of the country or died. The numerator for this rate are members of the same cohort who were not attending school for 4 consecutive weeks or more and who were not absent due to accident or illness. For a more detailed discussion of NELS dropout rates, please see appendix C.

[3]The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in August of 1992; excluded are students who dropped out between 1988 and 1992 and students who migrated out of the country or died. The numerator for this rate are members of the same cohort who were not attending school for 4 consecutive weeks or more and who were not absent due to accident or illness. For a more detailed discussion of NELS dropout rates, please see appendix C.

[4]The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in August of 1994; excluded are students who dropped out between 1988 and 1994 and students who migrated out of the country or died. The numerator for this rate are members of the same cohort who were not attending school for 4 consecutive weeks or more and who were not absent due to accident or illness. For a more detailed discussion of NELS dropout rates, please see appendix C.

[5]Not shown separately are 434 persons (approximately 2 percent of the unweighted sample) whose race–ethnicity is unknown.

NOTE: This table is based on the core cohort of eighth graders (i.e., this sample excludes students in the Base Year sample whose sex, race–ethnicity, and dropout status were determined through the Followback Study of Excluded Students). As such, numbers may differ from earlier reports.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88) Base Year, First, Second, and Third Follow-up Surveys, 1988, 1990, 1992, and 1994.

BEST COPY AVAILABLE

Table B8—Standard errors for table B7: National Education Longitudinal Study of 1988 (NELS:88) 8th- through 12th-grade cohort dropout rates, by sex and race–ethnicity: 1992 and 1994

Characteristic	Cohort dropout rate (percent)			
	Spring 1990–92[1]	Spring 1988–92[2]	August 1988–92[3]	August 1988–94[4]
Total	0.40	0.52	0.47	0.45
Sex				
Male	0.53	0.65	0.62	0.69
Female	0.55	0.73	0.65	0.48
Race–ethnicity[5]				
Asian/Pacific Islander	1.55	1.55	1.54	1.78
Hispanic	1.36	1.51	1.49	1.44
Black, non-Hispanic	1.16	1.61	1.51	1.30
White, non-Hispanic	0.41	0.54	0.47	0.49
American Indian/Alaskan Native	7.57	8.62	8.62	4.92

[1]The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in the spring of 1990; excluded are students who dropped out between 1988 and 1990 and students who migrated out of the country or died. The numerator for this rate are members of the same cohort who were not attending school for 4 consecutive weeks or more and who were not absent due to accident or illness. For a more detailed discussion of NELS dropout rates, please see appendix C.

[2]The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in the spring of 1992; excluded are students who dropped out between 1988 and 1992 and students who migrated out of the country or died. The numerator for this rate are members of the same cohort who were not attending school for 4 consecutive weeks or more and who were not absent due to accident or illness. For a more detailed discussion of NELS dropout rates, please see appendix C.

[3]The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in August of 1992; excluded are students who dropped out between 1988 and 1992 and students who migrated out of the country or died. The numerator for this rate are members of the same cohort who were not attending school for 4 consecutive weeks or more and who were not absent due to accident or illness. For a more detailed discussion of NELS dropout rates, please see appendix C.

[4]The denominator for this rate includes the members of the 1988 eighth-grade cohort who were still enrolled in school in August of 1994; excluded are students who dropped out between 1988 and 1994 and students who migrated out of the country or died. The numerator for this rate are members of the same cohort who were not attending school for 4 consecutive weeks or more and who were not absent due to accident or illness. For a more detailed discussion of NELS dropout rates, please see appendix C.

[5]Not shown separately are 434 persons (approximately 2 percent of the unweighted sample) whose race–ethnicity is unknown.

NOTE: This table is based on the core cohort of eighth graders (i.e., this sample excludes students in the Base Year sample, whose sex, race–ethnicity, and dropout status were determined through the Followback Study of Excluded Students). As such, numbers may differ from earlier reports.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88) Base Year, First, Second, and Third Follow-up Surveys, 1988, 1990, 1992, and 1994.

Table B9—High School and Beyond (HS&B) and National Education Longitudinal Study of 1988 (NELS:88) 10th- through 12th-grade cohort dropout rates, by background characteristics: August 1982 and 1992

Characteristic in 10th grade	Cohort dropout rate (percent) HS&B 1980–82	NELS:88 1990–92
Total	9.9	5.6
Sex		
Male	11.0	5.2
Female	9.0	6.0
Race–ethnicity*		
Asian/Pacific Islander	2.2	4.6
Hispanic	16.8	10.9
Black, non-Hispanic	11.3	7.6
White, non-Hispanic	8.8	4.3
American Indian or Alaskan Native	25.1	18.2
Family below poverty level		
Yes	13.0	10.9
No	6.1	3.6
Family composition		
Two parents	5.5	4.2
Two adults/one parent	12.9	7.9
Single parent	11.0	7.4
Other	19.8	10.4
Has own child in home		
Yes		
Male	19.4	6.8
Female	33.0	18.3
No		
Male	8.3	5.1
Female	7.0	5.5

*Not shown separately are those included in the total whose race–ethnicity is unknown.

NOTE: See appendix C for the definitions of poverty and family composition used in these tables.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Study (HS&B), Sophomore Cohort, First Follow-up Survey, 1982; and U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88) First and Second Follow-up Surveys, 1990 and 1992.

Table B10—Standard errors for table B9: High School and Beyond (HS&B) and National Education Longitudinal Study of 1988 (NELS:88) 10th- through 12th-grade cohort dropout rates, by background characteristics: August 1982 and 1992

Characteristic in 10th grade	Cohort dropout rate (percent) HS&B 1980–82	NELS:88 1990–92
Total	0.42	0.36
Sex		
Male	0.64	0.45
Female	0.54	0.56
Race–ethnicity*		
Asian/Pacific Islander	0.73	2.14
Hispanic	1.65	1.44
Black, non-Hispanic	1.15	1.22
White, non-Hispanic	0.46	0.33
American Indian or Alaskan Native	5.33	8.09
Family below poverty level		
Yes	0.86	1.16
No	0.28	0.35
Family composition		
Two parents	0.24	0.42
Two adults/one parent	1.25	1.06
Single parent	0.78	0.96
Other	1.86	2.22
Has own child in home		
Yes		
Male	6.50	2.35
Female	7.42	3.91
No		
Male	0.38	0.46
Female	0.36	0.56

*Not shown separately are those included in the total whose race–ethnicity is unknown.

NOTE: See appendix C for the definitions of poverty and family composition used in these tables.

SOURCE: U.S. Department of Education, National Center for Education Statistics, High School and Beyond Study (HS&B), Sophomore Cohort, First Follow-up Survey, 1982; and U.S. Department of Education, National Center for Education Statistics, National Education Longitudinal Study of 1988 (NELS:88) First and Second Follow-up Surveys, 1990 and 1992.

Table B11—High school completion rates of 18 through 24-year-olds not currently enrolled in high school or below, by state: October 1989-90 through 1996–98

State	Completion rate (percent)							
	1989-90	1990–92*	1991-93*	1992-94*	1993–95*	1994-96*	1995-97*	1996–98*
Total	85.0	85.5	85.0	85.7	85.8	86.1	85.8	85.6
Alabama	82.2	83.9	82.2	81.0	83.6	82.2	85.3	84.2
Alaska	88.7	86.9	88.7	89.0	90.5	90.9	85.1	88.3
Arizona	83.2	81.7	83.2	81.1	83.8	83.7	80.9	77.1
Arkansas	87.1	87.5	87.1	87.7	88.3	87.5	87.6	84.5
California	76.7	77.3	76.7	78.2	78.7	78.9	80.6	81.2
Colorado	87.8	88.1	87.8	87.2	88.4	87.6	88.2	85.5
Connecticut	89.7	89.9	89.7	90.9	94.7	92.6	94.4	91.6
Delaware	85.9	86.2	85.9	90.3	93.0	93.7	89.0	88.5
District of Columbia	82.0	84.0	82.0	87.2	87.7	86.4	85.7	84.9
Florida	83.2	84.1	83.2	84.5	80.6	83.2	81.8	83.6
Georgia	85.5	85.1	85.5	81.9	80.3	79.4	84.1	84.8
Hawaii	92.9	93.5	92.9	92.8	92.0	90.7	93.5	92.3
Idaho	83.1	84.7	83.1	89.0	86.0	86.7	87.6	85.8
Illinois	85.4	86.0	85.4	86.0	86.5	86.7	87.3	86.6
Indiana	88.9	87.8	88.9	87.4	88.5	88.4	88.9	89.3
Iowa	94.5	94.6	94.5	94.0	93.2	94.2	88.6	88.0
Kansas	92.5	93.2	92.5	91.4	90.9	92.2	91.5	91.5
Kentucky	81.6	81.1	81.6	82.6	82.4	83.3	83.3	85.2
Louisiana	80.6	83.9	80.6	82.5	80.1	83.9	80.4	81.6
Maine	90.5	91.9	90.5	93.4	92.9	94.0	90.4	91.6
Maryland	87.3	88.6	87.3	91.0	93.6	92.9	94.9	94.5
Massachusetts	89.6	89.8	89.6	90.5	92.5	91.2	91.4	90.6
Michigan	86.3	87.2	86.3	88.3	88.6	89.2	89.7	91.0
Minnesota	92.0	92.5	92.0	91.7	93.1	93.2	91.6	90.0
Mississippi	84.0	85.4	84.0	88.6	83.9	88.8	80.9	82.0
Missouri	88.0	88.1	88.0	88.3	90.3	90.0	89.2	90.4
Montana	92.7	91.6	92.7	91.6	89.6	91.6	89.3	91.1
Nebraska	90.8	92.5	90.8	92.5	94.1	95.9	90.8	91.2
Nevada	82.6	82.1	82.6	83.3	81.9	83.4	76.7	78.1
New Hampshire	87.3	87.9	87.3	89.0	86.9	86.6	90.3	89.2
New Jersey	90.0	90.8	90.0	89.8	91.6	91.0	93.0	91.8
New Mexico	84.7	84.1	84.7	84.3	82.3	83.7	78.8	78.6
New York	87.7	88.0	87.7	87.6	87.0	87.5	85.0	84.7
North Carolina	82.8	83.0	82.8	84.2	85.5	85.3	85.3	85.2
North Dakota	95.6	96.3	95.6	95.7	96.4	96.6	97.2	94.7
Ohio	89.3	90.0	89.3	89.7	88.3	89.6	88.5	89.4
Oklahoma	87.1	84.3	87.1	81.8	86.7	83.1	87.4	86.0
Oregon	89.2	89.6	89.2	85.5	82.6	82.9	79.3	75.4
Pennsylvania	90.2	90.2	90.2	90.5	89.4	89.7	88.3	87.6
Rhode Island	87.4	87.9	87.4	90.4	89.4	90.7	86.0	86.1
South Carolina	82.6	85.0	82.6	85.5	87.8	87.0	89.2	87.6
South Dakota	87.6	89.1	87.6	91.2	91.3	93.2	88.2	89.8
Tennessee	76.5	76.7	76.5	77.5	84.5	82.3	84.2	86.8
Texas	78.4	80.0	78.4	81.2	79.5	80.5	80.5	80.2
Utah	93.9	93.9	93.9	94.6	93.3	93.9	90.9	90.7

Table B11—High school completion rates of 18 through 24-year-olds not currently enrolled in high school or below, by state: October 1989-90 through 1996–98—Continued

State	Completion rate (percent)							
	1989-90	1990–92*	1991-93*	1992-94*	1993–95*	1994-96*	1995-97*	1996–98*
Vermont	85.9	87.0	85.9	89.6	88.1	89.8	89.6	93.6
Virginia	87.0	88.6	87.0	89.8	87.5	88.6	87.1	85.9
Washington	87.4	90.7	87.4	89.2	85.7	87.3	88.2	87.7
West Virginia	82.7	83.3	82.7	84.6	86.8	85.6	88.6	89.1
Wisconsin	93.4	92.4	93.4	92.4	93.5	93.4	92.4	90.8
Wyoming	91.4	92.0	91.4	92.1	90.8	91.6	88.9	87.6

*Numbers in this table reflect 3-year averages. Numbers for these periods reflect new wording of the educational attainment item in the CPS beginning in 1992 and changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing. They also reflect change in population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

Table B12—Standard errors for table B11: High school completion rates of 18 through 24-year-olds not currently enrolled in high school or below, by state: October 1989-90 through 1996–98

State	Completion rate (percent)							
	1989-90	1990–92*	1991-93*	1992-94*	1993–95*	1994-96*	1995-97*	1996–98*
Total	0.21	0.21	0.21	0.25	0.21	0.21	0.20	0.20
Alabama	1.75	1.65	1.77	2.06	1.70	1.48	1.47	1.50
Alaska	4.41	4.77	4.27	3.42	3.90	4.43	4.53	4.02
Arizona	1.91	2.06	2.16	2.30	1.83	1.68	1.65	1.70
Arkansas	2.11	2.09	2.16	2.22	2.00	1.83	1.84	2.04
California	0.71	0.70	0.70	0.84	0.71	0.69	0.65	0.63
Colorado	1.74	1.74	1.78	1.92	1.55	1.53	1.48	1.63
Connecticut	1.58	1.59	1.59	1.63	1.29	1.09	1.27	1.56
Delaware	4.10	4.10	3.52	2.59	2.90	3.33	3.43	3.43
District of Columbia	4.70	4.78	4.65	4.09	4.13	4.15	4.05	4.22
Florida	1.02	0.98	0.95	1.17	1.03	1.04	0.99	0.95
Georgia	1.31	1.35	1.44	1.79	1.39	1.36	1.24	1.24
Hawaii	2.49	2.31	2.45	2.73	2.53	2.21	1.97	2.15
Idaho	3.82	3.70	3.19	3.18	3.03	2.94	2.61	2.77
Illinois	0.96	0.96	0.94	1.12	0.94	0.90	0.88	0.91
Indiana	1.28	1.36	1.34	1.50	1.24	1.21	1.23	1.21
Iowa	1.28	1.24	1.31	1.41	1.34	1.46	1.76	1.87
Kansas	1.55	1.48	1.64	1.78	1.73	1.65	1.56	1.52
Kentucky	1.86	1.94	1.95	2.20	1.95	1.93	1.85	1.78
Louisiana	1.79	1.67	1.77	2.06	1.89	1.75	1.66	1.58
Maine	2.68	2.42	2.15	2.09	2.30	2.54	2.68	2.50
Maryland	1.41	1.34	1.26	1.31	1.12	1.16	1.02	1.06
Massachusetts	1.13	1.16	1.16	1.32	1.06	1.09	1.15	1.18
Michigan	1.04	1.03	0.99	1.15	0.98	0.96	0.91	0.85
Minnesota	1.18	1.17	1.22	1.31	1.14	0.98	1.25	1.35
Mississippi	2.09	2.02	1.85	2.02	2.14	2.23	2.20	2.14
Missouri	1.33	1.31	1.34	1.43	1.33	1.28	1.29	1.20
Montana	2.92	3.00	2.96	2.93	3.50	3.32	3.16	2.74
Nebraska	2.21	2.00	2.00	1.56	1.79	1.90	2.07	1.97
Nevada	3.40	3.46	3.41	3.27	3.35	3.33	3.45	3.12
New Hampshire	2.95	3.05	2.93	3.33	3.18	3.26	2.85	2.99
New Jersey	1.01	1.01	1.08	1.24	0.99	0.92	0.89	0.94
New Mexico	2.82	2.97	2.99	3.19	3.00	3.08	2.89	2.85
New York	0.74	0.74	0.77	0.91	0.77	0.77	0.79	0.80
North Carolina	1.36	1.37	1.35	1.50	1.26	1.25	1.20	1.17
North Dakota	2.38	2.25	2.40	2.01	2.18	1.68	1.82	2.52
Ohio	0.86	0.86	0.88	1.08	0.93	0.95	0.89	0.87
Oklahoma	1.88	2.01	2.15	2.41	1.93	1.67	1.71	1.84
Oregon	1.81	1.78	2.01	2.50	2.13	2.18	2.13	2.20
Pennsylvania	0.85	0.85	0.83	1.04	0.89	0.88	0.90	0.91
Rhode Island	3.14	3.20	2.94	2.95	3.30	3.59	3.48	3.36
South Carolina	1.91	1.82	1.79	1.95	1.65	1.59	1.52	1.60
South Dakota	3.70	3.51	3.26	2.67	3.30	3.49	3.44	3.07
Tennessee	1.72	1.79	1.76	1.91	1.52	1.58	1.50	1.41
Texas	0.93	0.89	0.87	1.05	0.87	0.84	0.80	0.82
Utah	1.59	1.60	1.53	1.70	1.56	1.68	1.60	1.60
Vermont	4.71	4.66	4.08	3.48	4.34	4.31	3.90	3.06

Table B12—Standard errors for table B11: High school completion rates of 18 through 24-year-olds not currently enrolled in high school or below, by state: October 1989-90 through 1996–98—continued

State	Completion rate (percent)							
	1989-90	1990–92*	1991-93*	1992-94*	1993–95*	1994-96*	1995-97*	1996–98*
Virginia	1.34	1.28	1.18	1.45	1.24	1.33	1.28	1.36
Washington	1.52	1.33	1.38	1.66	1.44	1.40	1.32	1.29
West Virginia	2.67	2.65	2.57	2.64	2.38	2.35	2.25	2.17
Wisconsin	1.05	1.11	1.13	1.24	1.04	0.98	1.07	1.20
Wyoming	4.21	4.08	3.94	3.32	3.98	4.23	4.30	4.38

*Numbers in this table reflect 3-year averages. Numbers for these periods reflect new wording of the educational attainment item in the CPS beginning in 1992 and changes in the CPS beginning in 1994 due to newly instituted computer-assisted interviewing. They also reflect change in population controls used in the 1990 Census-based estimates, with adjustments for undercounting in the 1990 Census. See Appendix C for a fuller description of the impact of these changes on reported rates.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October (various years).

APPENDIX C

Technical Notes

Definition of Who Is a Dropout

There are variations in the dropout definitions of the existing data sources, including the Current Population Survey (CPS), the Common Core of Data (CCD), the High School and Beyond (HS&B) study, and the National Education Longitudinal Study of 1988 (NELS:88). In addition, the age or grade span examined and the type of dropout rate—status, event, or cohort—vary across the data sources. Furthermore, there were potentially significant changes in CPS procedures in 1986, 1992, and 1994.[30]

Defining and Calculating Event Dropout Rates Using the CCD

The Common Core of Data (CCD), administered by the National Center for Education Statistics (NCES), is an annual survey of the state-level education agencies in the 50 states, the District of Columbia, and the outlying areas. Through this survey, statistical information is collected on public schools, staff, students, and finance.

A dropout data collection component was field-tested during the 1989–90 school year. The participants were in approximately 300 school districts that included representatives from 27 states and two territories. The data were gathered through administrative records maintained at school districts and schools. The field test data were used to inform the design of a dropout statistics component for the CCD.

The definition that was agreed upon by NCES and the states was the following:

A dropout is an individual who:

1. Was enrolled in school at some time during the previous school year;
2. Was not enrolled at the beginning of the current school year;
3. Has not graduated from high school or completed a state- or district-approved educational program; and
4. Does not meet any of the following exclusionary conditions: transfer to another public school district, private school, or state- or district-approved education program; temporary absence due to suspension or school-approved education program; or death.

For the purpose of this definition:

- The school year is the 12-month period of time from the first day of school (operationally set as October 1), with dropouts from the previous summer reported for the year and grade in which they fail to enroll;[31]

---

[30]While a change in procedures occurred in 1986, the new procedures are reflected beginning in 1987 in this report. See page 64 for a more detailed explanation of these changes.

[31]Although states were asked to report on an October through September reporting cycle, for purposes of this report, states that reported on an alternative July through June cycle in 1996-1997 are also included.

- Individuals who are not accounted for on October 1 are considered dropouts;

- An individual has graduated from high school or completed a state- or district-approved educational program upon receipt of formal recognition from school authorities. A state- or district-approved educational program may consist of special education and district or state-sponsored GED preparation.

The collection was initiated with a set of instructions to state CCD coordinators in the summer of 1991. Those instructions specified the details of dropout data to be collected during the 1991–92 school year. Dropouts, like graduates, are reported for the preceding school year. The 1991–92 data were submitted to NCES as a component of the 1992–93 CCD data collection. Most recently, the 1996–97 dropout data were submitted as a component of the 1997–98 CCD collection.

The dropout collection through the CCD is designed to be consistent with the current CPS procedures. However, there are differences in dropout collection procedures between two data sets. First, the CCD represents a state's public school dropout counts; in other words, the dropout rate represents the number of students who have dropped out over the total number of students enrolled in the state. This differs from the CPS state-level dropout counts in a few ways. The CPS counts include students who were enrolled in either public or private schools. Also, the CPS is a count of students who live in the state, not necessarily those who went to school in that state. The second difference between CPS and CCD dropout collection procedures is that the CCD collection includes dropouts in grades 7 through 12 versus only grades 10 through 12 in the CPS (although CCD event rates are reported for grades 9 through 12 in this report). The CCD collection is based on administrative records rather than a household survey as in CPS. One other difference in the CCD collection is that it counts anyone receiving a GED outside of a regular (approved) secondary education program as a dropout.

As in developing any nationally consistent definition, there is considerable variation in the operationalization of the dropout definition across local, state, and federal data collections on such issues as whether

- those who return to school after October 1 are identified as dropouts;
- those who complete a grade and drop out over the summer are attributed to the grade completed or the next grade;
- students entering GED programs are considered dropouts; and
- a student who drops out more than once can be counted as a dropout more than once.

As this process progresses further, there will, no doubt, be some discontinuities in dropout reporting as more consistent data become available.

Defining and Calculating Dropout Rates Using the CPS

Event Rates

The October Supplement to the CPS is the only national data source that currently can be used to estimate annual national dropout rates. As a measure of recent dropout experiences, the event rate measures the proportion of students who dropped out over a 1-year interval of time.

The numerator of the event rate for 1998 is the number of persons 15 through 24 years old surveyed in 1998 who were enrolled in high school (grades 10–12) in October 1997, were not enrolled in high school in October 1998, and who also did not complete high school (that is, had not received a high school diploma or an equivalency certificate) between October 1997 and October 1998.

The denominator of the event rate for 1998 is the sum of the dropouts (that is, the numerator) and the number of all persons 15 through 24 years old who attended grades 10, 11, and 12 in October 1997 who were still enrolled in October 1998 or who graduated or completed high school between October 1997 and October 1998.

The dropout interval is defined to include the previous summer and the current school year, so that once a grade is completed, the student is then at risk of dropping out of the next grade. Given that the data collection is tied to each young adult's enrollment status in October of two consecutive years, any student who drops out and returns within the 12-month period is not counted as a dropout.

Status Rates

The status dropout rate is a cumulative rate that estimates the proportion of young adults who are dropouts, regardless of when they dropped out.

The numerator of the status rate for 1998 is the number of young adults ages 16 through 24 years who, as of October 1998, had not completed high school and were not currently enrolled. The denominator is the total number of 16- through 24-year-olds in October 1998.

CPS Design

The CPS is a nationally representative sample survey of all households. The survey is conducted in approximately 50,000 dwelling units in 729 primary sampling units. Dwelling units are in-sample for 4 successive monthly interviews, out-of-sample for the next 8 months, and then returned to the sample for the following 4 months. The sample frame is a complete list of dwelling-unit addresses at the time of the Census

updated by demolitions and new construction and field listings. The population surveyed excludes members of the Armed Forces, inmates of correctional institutions, and patients in long-term medical or custodial facilities; it is referred to as the civilian, noninstitutionalized population. Typically, about 4 percent of dwelling units are not interviewed because occupants are not at home after repeated callbacks or for some other reason.

An adult member of each household serves as the informant for that household, supplying data for each member of the household. In addition, in October, supplementary questions regarding school enrollment are asked about eligible household members 3 years old and over. Most interviews are conducted by phone using computer-assisted telephone interviewing.

CPS Dropout Data Collection

CPS data on educational attainment and enrollment status in the current year and prior year are used to identify dropouts, and additional CPS data are used to describe some of their basic characteristics. The CPS provides the only source of national time series data on dropout rates. However, because CPS collects no information on school characteristics and experiences, its uses in addressing dropout issues are primarily for providing some insights on who drops out. In addition, the sample design of the CPS yields estimates for Hispanics and Asians/Pacific Islanders that tend to have large standard errors, which can make it difficult to interpret patterns in Hispanic and Asians/Pacific Islander dropout rates.

The October CPS Supplement enrollment items used to identify dropouts include the following:

- Is . . . attending or enrolled in regular school?
- What grade or year is . . . attending?
- Was . . . attending or enrolled in a regular school or college in October, 199-, that is, October of last year?
- What grade or year was . . . attending last year?

Changes Introduced in 1986

In an effort to improve data quality, in 1986, the Bureau of Census instituted new editing procedures for cases with missing data on school enrollment items. The effect of the editing changes was evaluated for data from 1986 by applying both the old and new editing procedures. The result was an increase in the number of students enrolled in

school the current year and a decrease in the number of students enrolled last year but not enrolled in the current year (i.e., dropouts). The new editing procedures lowered, but not significantly, the 1986 event rate for 14- through 24-year-olds dropping out of grades 10–12 by about 0.4 percentage points, from 4.69 to 4.28. The changes in the editing procedures made even less of a difference in the status dropout rates for 16- through 24-year-olds (12.2 percent based on the old procedures and 12.1 percent based on the new).

While a change in procedures occurred in 1986, the new procedures are reflected beginning in 1987 in this report. The 1986 data are based on the old editing procedures.

Changes Introduced in 1992

Before 1992, educational attainment was based on the control card questions on highest grade attended and completed. Identification as a high school graduate was derived based on attendance and completion of grade 12.

The control card items used to identify educational attainment were

- What is the highest grade or year . . . has attended?
- Did . . . complete that grade?

The 1992 redesign of the CPS introduced a change in the data used to identify high school completers. Dropout data from the CPS are now based on a combination of control card data on educational attainment and October Supplement data on school enrollment and educational attainment. In 1992 the U.S. Census Bureau changed the items on the control card which measured each individual's educational attainment.

The new control card educational attainment item is as follows:

- What is the highest level of school . . . has completed or the highest degree . . . has received?

The following response categories are used for high school:

- 9th grade,
- 10th grade,
- 11th grade, and
- 12th grade—no diploma.

Students whose highest grade completed is the 9th, 10th, or 11th grade are assumed to have dropped out in the next grade (i.e., the 10th, 11th, and 12th grades, respectively).

The following response categories are used to identify high school completers:

- High school graduate—high school diploma or the equivalent (for example GED); and

- All categories indicating some postsecondary education, from some college, no degree, through doctorate degree.

Although the response categories are not automatically read to each respondent, they can be used as a prompt to help clarify the meaning of a question or a response. Identification as a high school completer is based on the direct response to the new control card educational attainment item.

Differences in the pre-1992 and later methods of identifying high school completers reflect two phenomena: not all 12th-grade completers receive a high school diploma or equivalent, and not all holders of a high school diploma or certificate complete the 12th grade. These differences affect the numbers and proportions of event and status dropouts.

Differences in the event rate. In the case of the event rate, in previous years, students who completed 12th grade and left high school without graduating or receiving an equivalent credential were counted as completers when they were, in fact, dropouts. On the other hand, some students who left school because they completed high school before the 12th grade were identified as dropouts when they were really early completers (e.g., those who passed the California Challenge Exam, received a GED certificate, or were admitted early to college).[32] The current use of actual graduation or completion status includes the first group as dropouts and the second group as completers.

Compared with previous years, the event dropout rate now includes 12th graders who did not receive some type of credential in the numerator count of dropouts, and the early completers are not included in the numerator as dropouts. The denominator is not changed.

In 1992, the net effect of these changes resulted in an increase in the aggregate event dropout rate that was not significant. In 1992, the October CPS included both versions of the educational attainment items—the old items based on the number of years of school completed and the new one based on the more accurate response categories.[33] Using the old items, the estimated event rate for 1992 was 4.0, compared with a rate of 4.4 percent in 1992 using the new educational attainment item.

---

[32]Although before 1992 the questionnaire did not include the words "high school diploma or equivalency certificate," the interviewer instructions included an instruction to record 12th grade for people who completed high school with a GED or other certificate although they had dropped out earlier. The specific inclusion of these words on the questionnaire appear to have made a difference in the quality of responses from the household informant.

[33]Unlike previous years, however, data for individuals missing on the variables representing years of school completed ("What is the highest grade or year . . . has attended?" and "Did . . . complete that grade?") were not imputed by the U.S. Census Bureau. For this analysis, missing data were imputed on these variables based on the grade individuals attended last year (if enrolled last year). For those individuals who were missing data and were not enrolled last year, the highest grade completed was imputed by examining the responses to the new educational attainment variable.

Differences in the status rate. The status rate involves a third group of students who were coded differently before 1992. These students leave high school before completing the 12th grade, never complete the 12th grade, but later graduate or complete high school by some alternative means, such as an equivalency exam. Before 1992, these young adults were coded as dropouts. Since 1992, members of this group have been coded as graduates or completers. Furthermore, the explicit inclusion of high school graduation or completion, including the GED as a response category, may have increased the likelihood of identifying late completers.

Under the procedures introduced in 1992, the 12th graders who do not complete high school or the equivalent are now included in the numerator of the status dropout rate, while early and late completers are not included. The denominator is not changed. These changes, including the identification and removal of late completers from the dropout count, contributed to a decrease in the status dropout rate. Indeed, using years of school completed rather than the new educational attainment item, the status rate in 1992 rises to 11.4 percent rather than the 11.0 percent based on the new educational attainment item. However, the estimate of 11.4 percent is still much lower than the status rate for 1991 (12.5 percent). While this could represent real change in the status dropout rate—the fact that this would be the largest decrease in the status dropout rate seen in the time series data from 1972 to 1995, coupled with the fact that the rate for 1993 also was 11.0 percent—leads one to speculate that introducing the new educational attainment item resulted in more accurate data on educational attainment throughout the survey, including the variables that had been used to calculate the number of years of school completed.

One exception to the procedures used to identify dropouts in the CPS is the treatment by the Bureau of the Census of students in special schools (i.e., not regular schools). These special schools are

> . . . schools that are not in the regular school system, such as trade schools, business colleges, and schools for the mentally handicapped, which do not advance students to regular school degrees.[34]

When the U.S. Census Bureau identifies students in special schools, they code them as not enrolled in regular school. Therefore, if a person enrolled in a special school is reported as completing less than the 12th grade, he or she will be counted as a status dropout.

Changes Introduced in 1994

During the 1994 data collection and processing, two additional changes were implemented in the CPS. Computer-assisted telephone interviewing (CATI) was

[34]U.S. Department of Commerce, Bureau of the Census, *School Enrollment—Social and Economic Characteristics of Students: October 1994* (Washington, D.C.: U.S. Government Printing Office, September 1996).

introduced, resulting in higher completion rates for each individual data item and thus less reliance on allocation of missing responses. If the allocation procedures yielded a distribution different from the 1994 reported patterns, there is the potential for a change in the distribution of the high school completion status.

In 1994, there were also changes introduced in the processing and computing phase of data preparation. The benchmarking year for these survey estimates was changed from the 1980 Census to the 1990 Census. In addition, adjustments for undercounting in the Census were also included, which had not been done before. Thus, any age, sex, or racial–ethnic groups that were found to be under-represented in the 1990 Census were given increased weights. Analysis using 1993 data of the effect of the changes in the benchmarking year and adjustments for undercounting indicate that the change especially affected the weights assigned to Hispanic young adults (table C1).

Table C1—Average weights and population estimates using 1980 and 1990 Census-based weights for all 15- through 24-year-olds, by race–ethnicity: October 1993

	1980-based weights		1990-based weights		
Race–ethnicity	Average weight	Population estimate (thousands)	Average weight	Population estimate (thousands)	Percentage change*
White, non-Hispanic	1.79	23,911	1.84	24,611	2.8
Black, non-Hispanic	2.25	5,087	2.33	5,285	3.6
Hispanic	2.09	3,998	2.48	4,747	18.7

*Change in rates between 1980-based weights and 1990-based weights using 1980 as the base year (i.e., for whites the calculation is [(1.84-1.79)/1.79]).

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1993.

These changes can affect both the numerator and denominator of the dropout rates. Analyses of the 1993 data showed that the change in the benchmark year for the sample weights increased the Hispanic status and event dropout rates somewhat, while it had little effect on the white or black rates (table C2). However, the change in the overall event and status rates appears to be driven by the increase in the estimated size of the Hispanic population. Since Hispanics drop out at higher rates than do other groups, increasing their relative proportion of the population increases the overall dropout rates.

Table C2 shows that, overall, the change in the benchmark year had a larger impact on status rates than on event rates. Using the 1990-based weights increased the event rate by 1.2 percent, but raised the status rate by 3.2 percent.

Table C2—Estimated event and status dropout rates based on 1980 and 1990 Census weights: October 1993

Characteristic	1980-based weights (percent)		1990-based weights (percent)		Percent difference in rates	
	Event	Status	Event	Status	Event	Status
Total	4.46	11.01	4.52	11.36	1.3	3.2
Sex						
Male	4.58	11.17	4.65	11.61	1.5	4.0
Female	4.34	10.85	4.38	11.10	1.0	2.3
Race–ethnicity						
White, non-Hispanic	3.93	7.94	3.95	7.96	0.5	0.3
Black, non-Hispanic	5.83	13.56	5.81	13.52	-0.3	-0.3
Hispanic	6.72	27.52	6.90	27.88	2.8	1.3
Other	2.79	7.01	2.87	7.04	2.9	0.4

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1993.

Defining and Calculating High School Completion Rates Using the CPS

The educational attainment and high school completion status data from the October CPS are also used to measure the high school graduation and completion rates. The completion rate computed and published is for the young adult population in the years beyond high school—that is, the 18- through 24-year-old population. These rates are reported nationally by race–ethnicity. At the state level, 3-year moving averages are computed to yield more stable estimates for completion rates.

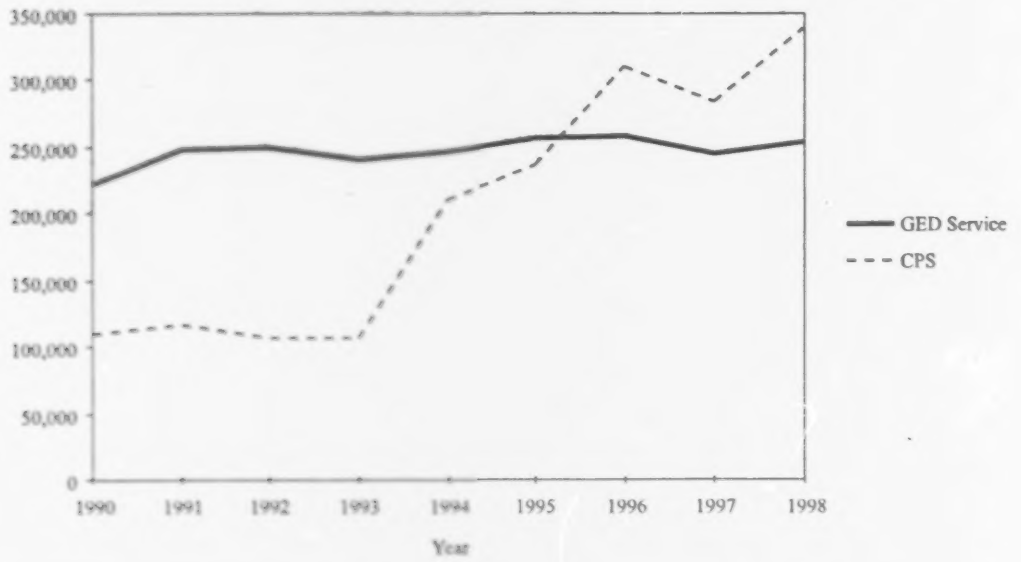
As was noted in the section discussing completion rates in this report (pp. 18–25), state completion rates reflect the experiences of the 18- through 24-year-olds living in the state at the time of the interview; thus, movements in and out of states to accommodate employment and postsecondary education may be evident in some states. For example, a state with a relatively large unskilled labor employment sector might have a lower high school completion rate than anticipated due to an influx of young workers. Conversely, a state with a disproportionate number of colleges and universities might have a higher high school completion rate than anticipated due to an influx of postsecondary students.

Increases in GED Rates

The section on high school completion rates indicated that there was a substantial increase in the last few years in the estimate of the percentage of 18- through 24-year-olds getting GEDs. For example, the alternative completion rate was 4.9 percent in 1993; however, it rose to 7.0 percent in 1994 and to 9.8 percent in 1996, and then reached 10.1 in 1998. Although the standard errors on these estimates are fairly large, the absolute change is also quite large. The large increase between 1993 and 1994 came at the time when CPS instituted computer-assisted telephone interviewing (CATI) in 1994.

The American Council on Education (ACE), which administers the GED, produces annual reports on the number of persons taking the GED and the number of persons who were issued a GED credential. From these reports, it is possible to calculate the number of 18- through 24-year-olds who received a GED in the past year for 1990 through 1998. It is also possible to estimate the same quantity from the CPS data for 1990 through 1998 by looking at only those who were reported to have completed a GED last year and using this, along with the GED item, to calculate how many 18- through 24-year-olds obtained GEDs each year. The CPS estimates of the number of GED recipients in the years 1990 through 1993 were lower than the ACE estimates in each of these years. For 1994 through 1997, the CPS estimates are much closer to the estimates from the ACE than are those from previous years and are not statistically different from the estimates for the ACE in these years. The CPS estimate for 1998 is statistically different from the estimate from ACE (figure C1 and table C3).

Figure C1—Number of 18- through 24-year-olds who received a GED in given year: 1990 through 1998*



*These numbers represent the total number of GED credentials earned by 18- through 24-year-olds in the United States only. Credentials earned by adults in Insular Areas and Freely Associated States (IAFAS), Canada, the military, and internationals are not included in these numbers.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (various years); and American Council on Education, GED Testing Service, *GED Statistical Report*, 1990 to 1998.

Table C3—Number of 18- through 24-year-olds who received a GED in given year: 1990 through 1998

Year	Number of GEDs received		Standard error
	GED Service*	CPS	CPS
1990	222,295	111,023	16,728
1991	247,767	117,371	17,197
1992	249,470	107,030	16,425
1993	241,787	107,415	16,455
1994	247,051	211,560	23,047
1995	256,441	237,876	24,424
1996	258,957	312,645	27,957
1997	244,749	286,811	26,793
1998	254,239	340,784	24,790

*These numbers represent the total number of GED credentials earned by 18- through 24-year-olds in the United States only. Credentials earned by adults in Insular Areas and Freely Associated States (IAFAS), Canada, the military, and internationals are not included in these numbers. For more detailed breakdowns of adults who have earned GED credentials, see the *GED 1998 Statistical Report*.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (various years); and American Council on Education, GED Testing Service, *GED Statistical Report*, 1990 to 1998.

Definition of Family Income in the CPS

Family income is derived from a single question asked of the household respondent. Income includes money income from all sources including jobs, business, interest, rent, social security payments, and so forth. The income of nonrelatives living in the household is excluded, but the income of all family members 14 years old and over, including those temporarily living away, is included. Family income refers to receipts over a 12-month period.

Income for families from which no income information was obtained (about 5 percent of families) was imputed by using a sequential hot deck procedure. A total of 200 imputation classes were created—5 levels of the age of head of household, by 5 levels of the education of the head of household, by 2 levels for the employment status of the head of household, and by 4 levels of the number of workers in the household. To minimize the multiple use of a single donor, up to five donors were placed in each imputation class. A donor was selected at random from these five donors when a family with missing income information was encountered. In a few instances (about 10 of 50,000 families in each year), an imputation class had no donors, but a family from the class with missing income information was encountered. In these cases, a donor was selected by collapsing similar classes until a nonempty imputation class was created.

To help make comparisons over time, the categorical family income information was transformed into a continuous family income variable. The transformation was accomplished by randomly assigning an income value for each family from the income interval to which its income belonged. For intervals below the median, a rectangular probability density function was used; for those above the median, a Pareto probability density function was used. The methodology has a feature that if the continuous family income variable were transformed back to a categorical family income variable, the value for each family would be identical to the original data. Based on the continuous family income variable, a family income percentile variable was calculated for each person in the survey that represents that person's position in the family income distribution. For example, if 25 percent of all persons have a lower value of family income (and 75 percent have a higher value), then the person's family income percentile variable has a value of 25. The methodology gives all persons in the same household the same value of both the categorical and continuous versions of family income.

There are several issues that affect the interpretation of dropout rates by family income using the CPS. First, it is possible that the family income of the students at the time they dropped out was somewhat different from their family income at the time of the CPS interview. Furthermore, family income is derived from a single question asked of the household respondent in the October CPS. In some cases, there are persons 15 through 24 years old living in the household who are unrelated to the household respondent, yet whose family income is defined as the income of the family of the household respondent. Therefore, the current household income of the respondent may not accurately reflect that person's family background. In particular, some of the young adults in the 15- through 24-year age range do not live in a family unit with a parent

present. An analysis of 1997 event dropout rates by family income and family status (presence of parent in the household) indicates whether any bias is introduced into the analysis of dropout rates by family income by youth not living with at least one parent (table C4). About 10 percent of 15- through 24-year-olds enrolled in high school in the previous year were not living with a parent, and the percentage was much higher for students in low-income households than for those from middle- and high-income households.

The event dropout rate was lower for those with at least one parent in the household than for those not living with a parent. This was true for all 15- through 24-year-olds as well as within each category of household income. The dropout rate for those with at least one parent in the household was 82 to 83 percent of the dropout rate for all 15- through 24-year-olds within each of the three categories of household income. As a result, despite the fact that a much higher proportion of students in low-income households did not reside with a parent, the relative relationships among dropout rates for the three income groups were similar for those with a parent in the household to those for all 15- through 24-year-olds. Specifically, the event dropout rate for those from low-income households was about three times higher than for those from middle-income households and seven times higher than for those from high-income households, both among all 15- through 24-year-olds and among those residing with at least one parent.

Table C4—Percent distribution of event dropouts for 15- through 24-year-olds, according to household type, by family income: October 1997

Characteristics	Percentage			Event rate (percent)		
	Total	Parent in home	No parent in home	Total	Parent in home	No parent in home
Estimate						
Total	100.0	90.1	9.9	4.6	3.5	14.0
Low income	100.0	67.5	32.5	12.3	10.1	17.0
Middle income	100.0	91.8	8.2	4.1	3.4	11.6
High income	100.0	97.2	2.8	1.8	1.5	10.3
Standard error						
Total	—	0.09	0.09	0.32	1.33	0.56
Low income	—	0.40	0.40	1.36	2.18	1.89
Middle income	—	0.12	0.12	0.41	1.31	0.69
High income	—	0.10	0.10	0.37	2.06	0.87

— Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1997.

Definition of Geographic Regions in CPS

There are four Census regions used in this report: Northeast, Midwest, South, and West. The Northeast consists of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania. The Midwest consists of Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Minnesota, Missouri, North Dakota, South Dakota, Nebraska, and Kansas. The South consists of Delaware, Maryland, the District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas. The West consists of Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.

Definition of Immigration Status in CPS

Immigration status was derived from a variable on the control card inquiring about the citizenship status of the reference person:

Citizen Status:

1 = Native, born in the United States
2 = Native, born in Puerto Rico or U.S. outlying area
3 = Native, born abroad of American parent or parents
4 = Foreign born, U.S. citizen by naturalization
5 = Foreign born, not a citizen of the United States

Those coded (1) above (Native, born in United States) were considered born in the 50 states or the District of Columbia. All others were considered born elsewhere. (In 1997, about 1.0 percent of all 16- through 24-year-olds and Hispanic 16- through 24-year-olds were born abroad to American parents.)

Imputation for Item Nonresponse

For many key items in the October CPS, the Bureau of the Census imputes data for cases with missing data due to item nonresponse. However, item nonresponse data for the method of high school completion were not imputed by the Bureau of the Census before 1997. Special imputations were conducted for these items using a sequential hot deck procedure implemented through the PROC IMPUTE computer program developed by the American Institutes for Research.[35] Three categories of age, two categories of race, two categories of sex, and two categories of citizenship were used as imputation cells.

[35]D. H. McLaughlin, *Imputation for Non-Response Adjustment* (Washington, D.C.: American Institutes for Research, October 1991), updated: February 1994.

Defining and Calculating Cohort Dropout Rates Using NELS:88

The NELS:88 baseline was made up of a national probability sample of all regular public and private eighth-grade schools in the 50 states and District of Columbia in the 1987–88 school year. Excluded from the NELS:88 sample were Bureau of Indian Affairs schools, special education schools for the handicapped, area vocational schools that do not enroll students directly, and schools for dependents of U.S. personnel overseas; such school-level exclusions have a very small impact on national estimates.

NELS:88 started with the Base Year data collection in which students, parents, teachers, and school administrators were selected to participate in the survey. NELS:88 began with a target sample of 1,032 schools, of which 30 were deemed ineligible. Some 698 of the 1,002 eligible schools agreed to participate in the study. Given the longitudinal nature of the study, the initial school response rate of 69.7 percent was deemed too low to yield acceptable levels of schools, administrators, teachers, parents, and most importantly, students. To address this concern, a sample of sister schools was selected, and 359 replacement schools were identified and added to the study. Responses were obtained from 1,057 schools, thus increasing the school response rate to 77.7 percent (1,057/(1,002+359)). Usable student data were received for 1,052 of the schools.

The total eighth-grade enrollment for the 1,052 NELS:88 sample schools was 202,996. During the listing procedures (before 24–26 students were selected per school), 5.35 percent of the students were excluded because they were identified by school staff as being incapable of completing the NELS:88 instruments owing to limitations in their language proficiency or to mental or physical disabilities. Ultimately, 93 percent, or 24,599, of the sample students participated in the Base Year survey in the spring of 1988.

The NELS:88 First Follow-up survey was conducted in the spring of 1990. Students, dropouts, teachers, and school administrators participated in the follow-up, with a successful data collection effort for approximately 93 percent of the Base Year student respondents. In addition, because the characteristics and educational outcomes of the students excluded from the Base Year may differ from those of students who participated in the Base Year data collection, a special study was initiated to identify the enrollment status of a representative sample of the Base Year ineligible students. Data from this sample were then combined with First and Second Follow-up data in order to compute 8th- through 10th-grade, 10th- through 12th-grade, and 8th- through 12th-grade cohort dropout rates.

The Second Follow-up survey was conducted in the spring of 1992. Students, dropouts, parents, teachers, and school administrators participated in this follow-up. Approximately 91 percent of the sample of students participated in the Second Follow-up survey, with 88 percent of the dropouts responding.

The Second Follow-up High School Transcript Study was conducted in the fall of 1992. Transcript data spanning the 3 or 4 years of high school (9th or 10th through 12th grades) were collected for 1) students attending, in the spring of 1992, schools sampled

for the Second Follow-up School Administrator and Teacher Surveys; 2) all dropouts and dropouts in alternative programs who had attended high school for a minimum of one term; 3) all early graduates, regardless of school contextual sample type; and 4) triple ineligibles enrolled in the 12th grade in the spring of 1992, regardless of school affiliation. Triple ineligibles are sample members who were ineligible—due to mental or physical handicap or language barrier—for the Base Year, First Follow-up, and Second Follow-up surveys. The transcript data collected from schools included student-level data (e.g., number of days absent per school year, standardized test scores) and complete course-taking histories. Complete high school course-taking records were obtained only for those transcript survey sample members who had graduated by the end of the 1992 spring term; incomplete records were collected for sample members who had dropped out of school, had fallen behind the modal progression sequence, or were enrolled in a special education program requiring or allowing more than 12 years of schooling.

A total of 1,543 schools responded to the request for transcripts. Reasons cited by school staff for not complying with the request included inadequate permission for transcript release (some schools required parental permission for the release of minors' transcripts); no record of the sample member or no course-taking record because of brevity of enrollment; insufficient staff for transcript preparation (despite offers of remuneration for preparation costs); and archiving or transfer of sample member records. Student coverage rates were 89.5 percent for the total transcript sample and 74.2 percent for the dropout/alternative completers.

Missing from the cohort rates from NELS:88 is anyone who had dropped out before the spring of their eighth-grade year. Thus, the overall cohort rates reported here may be lower than they would have been if a younger cohort had been used. This may be particularly important for Hispanics, given that CPS data show that Hispanic dropouts tend to have completed less schooling than other dropouts. The cohort rates also reflect the school enrollment status of both eligible and ineligible nonparticipants and participants, to the extent that this information could be obtained.

The following definition of a dropout was used in NELS:88:

1. An individual who, according to the school (if the sample member could not be located) or according to the school and home, is not attending school (i.e., has not been in school for 4 consecutive weeks or more and is not absent due to accident or illness); or

2. A student who has been in school less than 2 weeks after a period in which he or she was classified as a dropout.

Thus, a student who was a temporary dropout (stopout) who was found by the study to be out of school for 4 consecutive school weeks or more and had returned to school (i.e., had been back in school for a period of at least 2 weeks at the time of survey

administration in the spring of 1990) would not be classified as a dropout for purposes of the cohort dropout rates reported here.

The basic NELS:88 procedure for identifying a dropout was to confirm school-reported dropout status with the student's household. For the First Follow-up, dropout status was obtained first from the school and then confirmed with the household for 96.4 percent of the dropouts. Thus, only 3.6 percent of the dropouts were identified by only school-reported information. For the Second Follow-up, 4.9 percent of the dropouts were identified by only school-reported information.

The 1988–90 dropout rate requires data from both 1988 and 1990. As a result, the size of the sample used in computing the 1988–90 rate is tied to the size of the sample in 1990. Many students changed schools between 1988 and 1990. Because of the costs associated with following small numbers of students in many schools, a subsampling operation was conducted at the time of the First Follow-up. Of the 24,599 students who participated in 1988, 20,263 students were sampled, and 130 were found to be out of scope (due to death or migration out of the country). The dropout rates from 1988 to 1990 reflect the experiences of 20,133 sample cases. Some 1,088 sample cases dropped out, and 19,045 sample cases continued in school.

The 1990–92 rate starts from the 19,045 student sample cases. Some 91 of the student sample cases from 1990 were identified as out of scope in 1992. The dropout rates from 1990 to 1992 reflect the experiences of 18,954 student sample cases.

The 1988–92 rates reflect the experiences of the 20,070 student sample cases. These cases result from the 20,263 subsampled student cases in 1990, less the 92 cases that were out of scope in both 1990 and 1992, less the 91 student sample cases identified as out of scope in 1992, less the 10 dropout sample cases identified as out of scope in 1992. Note that 24 student sample cases who were out of the country in 1990 returned to school in the United States by spring 1992, and an additional 14 student sample cases who were out of the country in spring 1990 returned to the United States by spring 1992 but did not reenroll (dropouts). In addition, another 354 student sample cases who dropped out between 1988 and 1990 returned to school by spring 1992.

HS&B Calculation of Cohort Dropout Rates

The original dropout variable in HS&B was defined somewhat differently from the dropout variable in NELS:88.[38] The essential difference was in the way in which the surveys handled students in alternative programs. Specifically, HS&B originally considered those who were in "alternative" programs, such as those leading to a GED, or those who had received a GED, as dropouts, not students or completers, respectively. NELS:88 was created so that researchers would have the flexibility to define dropping

[38] *The NELS:88 Second Followup Dropout Data Users Manual* contains an extensive discussion of the differences in the definition of the dropout variable in the two surveys.

out in more than one way. In order to equate the two data sets, several modifications were made to the original HS&B definition for the purpose of this report.[37]

Variables Used to Compare HS&B and NELS:88

Poverty

In the Base Year survey of HS&B, a student was considered to be living below the poverty line if their family size was one to three persons and their family income was $7,000 or less; or if their family size was four to six persons and their family income was $11,999 or less; or if their family size was seven or more persons and their family income was $15,999 or less.

In the Base Year survey of NELS:88, a student was considered to be living below the poverty line if their family size was one to two persons and their family income was $7,499 or less; or if their family size was three persons and their family income was $9,999 or less; or if their family size was four or five persons and their family income was $14,999 or less; or if their family size was six or seven persons and their family income was $19,999 or less; or if their family size was eight persons and their family income was $24,999 or less; or if their family size was nine or more persons and their family income was $34,999 or less.

Family Composition

In both HS&B and NELS:88, a student's family composition was defined as follows:

1. Two parents—if both the father and mother were in the household.

2. Two adults/one parent—if the father was not in household but the mother and a male guardian/stepfather were in the household; or if the mother was not in the household but the father and a female guardian/stepmother were in the household.

3. Single parent—if the father was in the household and no other adult partner was in household; or if the mother was in the household and no other adult partner was in the household.

4. Other—if neither parent were in the household.

---

[37]See the technical appendix to P. Kaufman, M. McMillen, and P. Sweet, *A Comparison of High School Dropout Rates in 1982 and 1992* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics, October 1996).

Accuracy of Estimates

Most of the estimates in this report are derived from samples and are subject to two broad classes of error—sampling and nonsampling error. Sampling errors occur because the data are collected from a sample of a population rather than from the entire population. Estimates based on a sample will differ somewhat from the values that would have been obtained from a universe survey using the same instruments, instructions, and procedures. Nonsampling errors come from a variety of sources and affect all types of surveys, universe as well as sample surveys. Examples of sources of nonsampling error include design, reporting, and processing errors and errors due to nonresponse. The effects of nonsampling errors are more difficult to evaluate than those that result from sampling variability. As much as possible, procedures are built into surveys in order to minimize nonsampling errors.

In reporting sample survey data, estimates based on unweighted sample sizes less than 30 are not displayed. The standard error is a measure of the variability due to sampling when estimating a parameter. It indicates how much variance there is in the population of possible estimates of a parameter for a given sample size. Standard errors can be used as a measure of the precision expected from a particular sample. The probability that a complete census would differ from the sample by less than the standard error is about 68 out of 100. The chances that the difference would be less than 1.65 times the standard error are about 90 out of 100; that the difference would be less than 1.96 times the standard error, about 95 out of 100.

Standard errors for percentages and number of persons based on CPS data were calculated using the following formulas:

Percentage:

$$se = \sqrt{(b / N)(p)(100 - p)}$$

where p = the percentage ($0 < p < 100$),
N = the population on which the percentage is based, and
b = the parameter associated with the characteristic;
b is equal to 2,369 for the total or white population; 2,680 for the black population; and 3,051 for the Hispanic population ages 14 through 24 for 1997 and 1998.

Number of persons:

$$se = \sqrt{(bx)(1 - x / T)}$$

where x = the number of persons (i.e., dropouts),
T = population in the category (i.e., blacks ages 16 through 24), and
b = as above.

Standard errors for the estimates in the tables appear in appendix A.

In 1999, the Bureau of the Census released new *b* parameters for October 1998 CPS estimates. With the release of the new parameters, the Bureau of the Census also made adjustments to parameters for earlier years based on March 1994 CPS data.

Response Rates

CPS. For the October 1998 core CPS, the unweighted response rate was 94 percent, and the response rate for the school supplement was 91 percent.

HS&B Second Follow-up. The overall unweighted student response rate was about 94 percent.

NELS:88 Second Follow-up. The overall unweighted student response rate was 94 percent, and the weighted response rate was 91 percent.

Methodology and Statistical Procedures

The comparisons in the text have all been tested for statistical significance to ensure that the differences are larger than those that might be expected due to sampling variation. Two types of comparisons have been made in the text.

Differences in two estimated percentages. The Student's *t* statistic can be used to test the likelihood that the differences between two percentages are larger than would be expected by sampling error.

$$t = \frac{P_1 - P_2}{\sqrt{se_1^2 + se_2^2}}$$

where P_1 and P_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors.

As the number of comparisons on the same set of data increases, the likelihood that the *t* value for at least one of the comparisons will exceed 1.96 simply due to sampling error increases. For a single comparison, there is a 5 percent chance that the *t* value will exceed 1.96 due to sampling error. For five tests, the risk of getting at least one *t* value that high increases to 23 percent, and for 20 comparisons, to 64 percent.

One way to compensate for this danger when making multiple comparisons is to adjust the alpha level to take into account the number of comparisons being made. The alpha rate is the probability of falsely rejecting the hypothesis that there are no differences between groups in the population. For example, rather than establishing an alpha level of 0.05 for a single comparison, the alpha level is set to ensure that the likelihood is less than 0.05 that the *t* value for any of the comparisons exceeds the critical value by chance alone when there are truly no differences for any of the comparisons. One such adjustment, the Bonferroni adjustment used here, is calculated by taking the desired alpha level and dividing by the number of possible comparisons, based on the variable(s) being compared. The *t* value corresponding to the revised, lower alpha level must be exceeded in order for any of the comparisons to be considered significant. For example, to test for differences in dropout rates among whites, blacks, Hispanics, and Asians/Pacific Islanders, the following steps would be taken:

- Establish the number of comparisons—in this case, six (whites and blacks; whites and Hispanics; whites and Asians/Pacific Islanders; blacks and Hispanics; blacks and Asians/Pacific Islanders; Hispanics and Asians/Pacific Islanders). The number of two-way comparisons that can be made equals [(n)(n-1)]/2, where n is the number of variable categories. Thus, with four categories the number of possible comparisons is [(4)(3)]/2 = 6.

- Divide the desired alpha level, 0.05, by the number of comparisons (e.g., six) to obtain the new alpha level (0.05/6 = 0.0083).

- Consult a table of *t* statistics (or the standard normal table for *z* values if the N is large) to find the *t* value that corresponds to that alpha (*t* = 2.64 for alpha = 0.0083).

All comparisons in this report were tested using the Bonferroni adjustment for the *t* tests. Where categories of two variables were involved, the number of comparisons used to make the Bonferroni adjustment was based on the relationship(s) being tested.

Trends. Regression analysis was used to test for trends across age groups and over time. Regression analysis assesses the degree to which one variable (the dependent variable) is related to a set of other variables (the independent variables). The estimation procedure most commonly used in regression analysis is ordinary least squares (OLS).

The analyses in this report were conducted on the event rates, status rates, and completion rates. The event rate and status rate estimates were used as dependent measures in the analysis, with a variable representing time and a dummy variable controlling for changes in the educational attainment item in 1992 (0 = years 1968 to 1991, 1 = 1992 to 1998) used as independent variables. However, in these data, some of the observations were less reliable than others (i.e., some years' standard errors were larger than those for other years). In such cases, OLS estimation procedures do not apply, and it is necessary to modify the regression procedures to obtain unbiased regression

parameters. The modification that is usually recommended transforms the observations to variables that satisfy the usual assumptions of ordinary least squares regression and then applies the usual OLS analysis to these variables.

This was done in this analysis using the data manipulation and regression capability of Microsoft EXCEL®. Each variable in the analysis was transformed by dividing each by the standard error of the relevant year's rate (event, status, or completion). The new dependent variable was then regressed on the new time variable and new editing-change dummy variable. All statements about trends in this report are statistically significant at the 0.05 level.

United States
Department of Education
Washington, DC 20208–5650

Official Business
Penalty for Private Use, $300

Postage and Fees Paid
U.S. Department of Education
Permit No. G–17

Standard Mail (A)